February 2006

United States Department of Agriculture • Economic Research Service • Volume 4, Issue 1

Amber Waves

The Economics of Food, Farming, Natural Resources, and Rural America

EU and U.S. Organic Sectors Shaped by Different Policies

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Amber Waves is published five times per year (February, April, June, September, and November) by the U.S. Department of Agriculture, Economic Research Service.

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Cover photo: By Susan Offutt

Amber Waves

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Amber Waves **ONLINE**

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Ken Hammond, USDA

U.S. Tobacco Sector Regroups

The USDA tobacco program, a fixture in Southeast agriculture since the 1930s, was terminated at the end of the 2004 crop year. With the 2005/06 crop year underway, the tobacco sector is entering a new era of minimal government intervention. Growers and buyers of tobacco are adapting to changes triggered by the lifting of the restrictions, including a 27-percent decline in production.

During the first post-program crop year, tobacco acreage decreased by 25 percent to 307,010 acres, the lowest level since before the Civil War. Tobacco production declined to 640 million pounds, the lowest level since 1879. Although precise figures are not available, industry sources report that the number of producers has dropped by more than half. Still, many remaining tobacco growers expanded operations. Some minor tobacco types, such as Northern Wisconsin cigar binder and Virginia sun-cured, are not being produced at all for the first time in over 100 years.

Following the lifting of geographical restrictions imposed by the program, tobacco production remains emphatically a Southeastern crop, although production of some types has shifted within the Southeast and even to the mid-Atlantic region. Pennsylvania producers who had previously planted cigar and Maryland leaf types are now growing burley for the first time. Some flue-cured producers in North Carolina and other States, where only flue-cured tobacco was grown, are adding burley to their crop mix.

The switch to burley is influenced by increased global demand due to changing world tastes in cigarettes. American-blend cigarettes, which contain both flue-cured and burley leaf, have replaced indigenous cigarette types containing either all flue-cured or all dark tobaccos. Higher global demand for burley has spurred production increases in a number of countries, including Brazil and Argentina, but U.S. burley remains a force in the world market. In addition, production costs are lower for burley, which is air cured, than for flue-cured, which is cured under heat provided by natural gas.

With the end of the tobacco program, U.S. tobacco production is likely to decline for a few more years. After this adjustment period ends, U.S. producers will be fewer in number, but they will be more competitive in domestic and world markets than previously. As prices fall, demand for U.S. tobacco will increase, and in the long run, production should slowly increase as well.

Thomas Capehart, thomasc@ers.usda.gov

This finding is drawn from . . .

Tobacco Situation and Outlook Yearbook, by Thomas Capehart, TBS-2005, USDA, Economic Research Service, December 2005, available at: www.usda.mannlib.cornell.edu/reports/erssor/specialty/tbs-bb/2005/tbs2005.pdf

Maurice R. Landes, USDA/ERS

FINDINGS

India's High Internal Marketing Costs Reduce Apple Demand

Efforts to expand market access for agricultural products typically focus on reducing tariffs and other border measures that impede trade. In India and other emerging markets, however, high internal marketing costs and marketing margins—or returns to importers, wholesalers, and retailers over and above their costs—can also be an important barrier to trade.

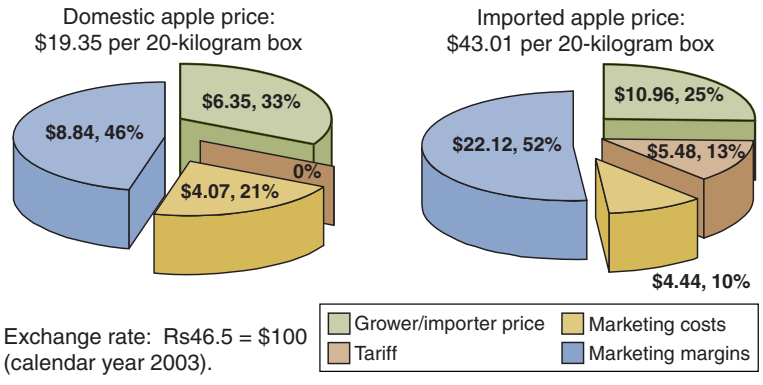
Strong income growth in India is projected to lead to continued expansion of apple demand and imports, including imports of U.S. apples. But high domestic prices of both domestic and imported apples, compared with other Indian fruit, are likely to limit demand growth among middle- and lower-income consumers who make up most of India's population. Even though India's 50-percent import tariff on apples is one of the highest in the world, high marketing margins account for the largest share—about half—of the consumer price of both domestic and imported apples in India. As a result, increased investment and competition in the domestic supply chain is likely to be particularly effective in boosting apple demand and imports.

Behind India's high marketing margins and costs is an array of factors related to the stage of economic development typical of emerging markets. The presence of relatively few importers in each of India's major markets and secretive bidding practices common in markets for domestic and imported apples provide an opportunity for traders to maintain high margins. Fragmented supply chains—typically including four to five intermediaries between the grower/importer and the consumer—result in a compounding of margins. Also, heavy regulation, high capital costs, and limited demand for high-value goods have constrained private investment in market infrastructure and the emergence of vertically integrated marketing firms.

Risk and uncertainty faced by importers, particularly regarding enforcement of nontariff import regulations, may also contribute to importers' demands for higher margins. India eliminated quantitative restrictions on apple imports in 1999 but imposed a 50-percent tariff and nontariff measures, including phytosanitary, pesticide residue, and food safety regulations. Some of India's requirements for apple imports, such as those pertaining to waxing and chemical residues, differ from U.S. and international standards. Although these regulations appear to have had little effect on India's apple trade so far, uncertainty regarding the rules and their enforcement could be disruptive and costly for traders.

Success in reducing India's marketing margins and its high tariff are likely to benefit U.S. apple producers, as well as Indian producers and consumers. U.S. apples have been highly competitive in the Indian market on the basis of both price and quality, earning about 31 percent of India's import market during 1999-2004, the largest share of any supplier.

Marketing margins account for largest slice of apple prices in India, 2003



Exchange rate: Rs46.5 = $100 (calendar year 2003).

Maurice Landes, mlandes@ers.usda.gov

This finding is drawn from . . .

Prospects for India's Emerging Apple Market, by Satish Y. Deodhar, Maurice Landes, and Barry Krissoff, FTS-319-01, USDA, Economic Research Service, January 2006, available at: www.ers.usda.gov/publications/fts/jan06/fts31901/

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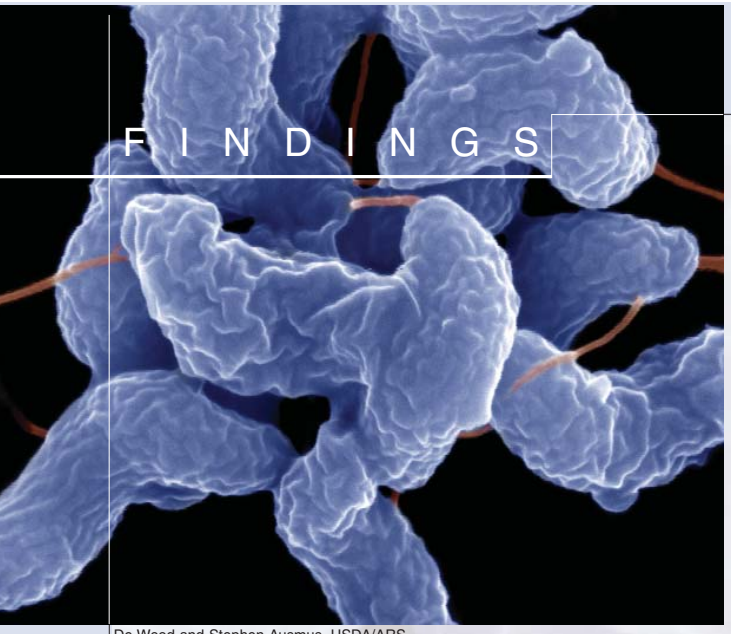


De Wood and Stephen Ausmus, USDA/ARS

New Pathogen Tests Trigger Food Safety Innovations

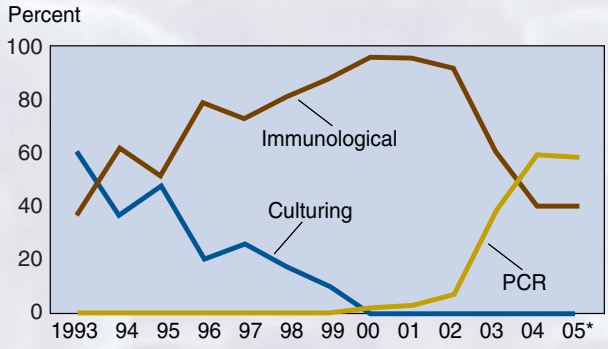
In November 2005, USDA's Food Safety and Inspection Service (FSIS) began using a rapid, highly sensitive testing system to detect the deadly O157 strain of *E. coli* in raw beef. This BAX® system, based on identifying a pathogen's DNA fragments, had already proved successful in screening for two other disease-causing microorganisms—*Salmonella* and *Listeria*—in raw and ready-to-eat meat and poultry products and pasteurized egg products. Such technological advances in the science of pathogen testing are changing the economics of food safety. The increased demand for pathogen testing that began in the early 1990s is being matched by an increased supply of sophisticated testing systems. Information provided by these tests has enabled the food industry to improve food production systems and the safety of food.

Both food companies and government regulators have recognized the need for more extensive pathogen testing. Foodborne disease outbreaks, such as the 1993 *E. coli* O157 outbreak that killed four children, prompted some meat retailers to demand that their suppliers meet pathogen testing requirements. In 1994, FSIS determined that any amount of *E. coli* O157 in ground beef adulterated the product, and, under the 1996 Pathogen Reduction/Hazard Analysis Critical Control Point systems, FSIS requires companies that produce raw meat and poultry products to test the products for generic *E. coli* and *Salmonella*.

In response to increased demand, the supply and quality of pathogen tests have changed significantly. Since 2000, modern biotechnology and bioinformatics have revolutionized the sensitivity and accuracy of pathogen tests. New tests deliver results that are more comprehensive, sensitive, and accurate in a shorter time (1-2 days instead of 3-5 days or weeks) and at lower cost. A leading U.S. testing company, Silliker, Inc., reports a threefold jump in demand for pathogen screening by North American food companies in the last decade, with DNA-based tests, such as the polymerase chain reaction (PCR) test, replacing older pathogen-culturing and immunological tests.

As a result of these developments in testing technologies, food companies have more information about where pathogens enter, grow, and hide in the food supply chain. These advances are in turn spurring innovation in other food safety technologies from farm to fork. With more accurate and more timely information on pathogen contamination, food producers can more easily identify the technologies that are working as well as weak spots in the safety-control system.

Polymerase chain reaction (PCR) tests now account for 60 percent of one food-testing company's *E. coli* O157 screenings



*2005 data incomplete.
Source: Silliker, Inc.

Tanya Roberts, tanyar@ers.usda.gov

This finding is drawn from . . .

Food Safety Innovations in the United States: Evidence from the Meat Industry, by Elise Golan, Tanya Roberts, Elisabete Salay, Julie Caswell, Michael Ollinger, and Danna Moore, AER-831, USDA, Economic Research Service, April 2004, available at: www.ers.usda.gov/publications/aer831/

"New Pathogen Testing Technologies and the Market for Food Safety Information," in *AgBioForum*, by Laurian Unnevehr, Tanya Roberts, and Carl Custer (2004) Vol. 7, No. 4, Article 7, available at: www.agbioforum.org/v7n4/v7n4a07-unnevehr.htm

J. Nord

More Households Had Difficulty Meeting Their Food Needs

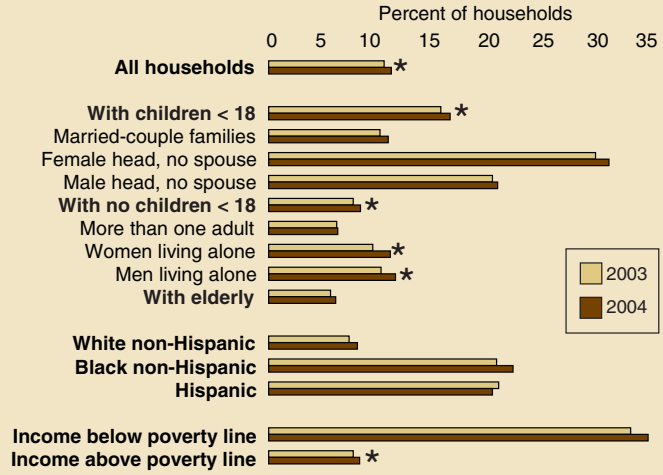
The food security of the Nation's households—their consistent access to enough food for active, healthy living—declined from 2003 to 2004. Although 88 percent of U.S. households were food secure throughout the year in 2004, the percentage of households that were food insecure at least some time during the year rose from 11.2 percent in 2003 to 11.9 percent in 2004. Over the same period, the percentage that were food insecure with hunger also increased, from 3.5 to 3.9 percent. The condition "food insecure with hunger" means that, at times during the year, one or more household members were hungry because of insufficient money and other resources for food.

The increase in the prevalence of food insecurity from 2003 to 2004 appears to have occurred in most regions and most types of households. The prevalence of food insecurity increased for households with children, households without children, women living alone, men living alone, households with incomes above the Federal poverty line ($19,157 for a family of four in 2004), and households in the Midwest and South. All other categories and regions also showed increases, except for Hispanic-headed households, but were within ranges that could have resulted from sampling variation.

In both 2003 and 2004, the prevalence of food insecurity was about twice as high for households with children as for households without children. Single women with children were particularly likely to have difficulty putting enough food on the table—about one in three were food insecure in each year. Single men with children were also more likely than the average U.S. household to be food insecure, although not as likely as single women with children. Households consisting of two or more adults with no children present and households with elderly members were less likely than the average U.S. household to have reported difficulties meeting their food needs. Black and Hispanic households had rates of food insecurity more than twice those of White non-Hispanic households.

Food insecurity is strongly linked to income. Households with incomes below the Federal poverty line were about four times as likely to be food insecure as households with incomes above that level. Food insecurity was somewhat more prevalent in the South and West than in the Northeast and Midwest.

Increased food insecurity was not concentrated in specific regions or types of households



*Change from 2003-04 was statistically significant with 90-percent confidence.
Source: Prepared by USDA, Economic Research Service using data from Current Population Survey Food Security Supplements.

Mark Nord, marknord@ers.usda.gov

This finding is drawn from . . .

Household Food Security in the United States, 2004, by Mark Nord, Margaret Andrews, and Steven Carlson, ERR-11, USDA, Economic Research Service, October 2005, available at: www.ers.usda.gov/publications/err11/

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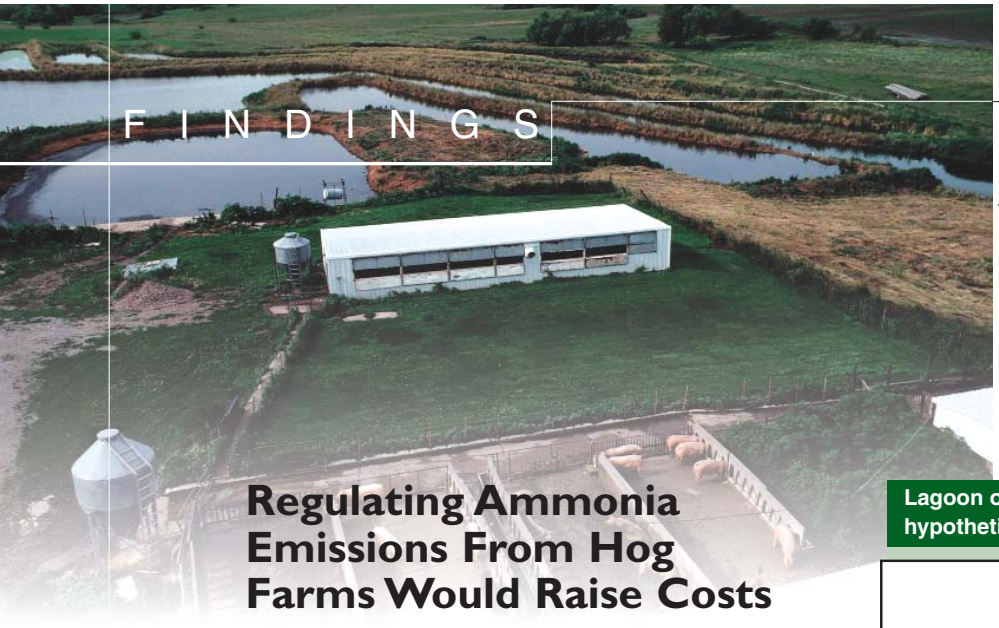

Tim McCabe, USDA/NRCS

Regulating Ammonia Emissions From Hog Farms Would Raise Costs

Nitrogen from livestock waste can degrade both surface water (via runoff from cropland) and air quality (via emissions of ammonia from manure storage facilities and cropland). Nitrogen runoff is regulated, in part, by requiring large livestock operations to follow a nutrient management plan. Except in California, there are no regulations on ammonia emissions from animal feeding operations, even though livestock operations are the Nation's largest source of ammonia. A recent ERS study considers the economic and environmental implications of a hypothetical ammonia restriction for the U.S. hog industry. The study finds that the effects of the policy on costs and emissions would vary by region and by the type of manure storage system used.

Hog operations usually store manure in lagoons or pits. Their choice of storage facility has major consequences for the level of ammonia emissions. Lagoons are designed to reduce manure's nitrogen content through ammonia volatilization, which allows farmers to apply more manure on less land without exceeding crop nutrient requirements, thereby lowering manure transportation costs by eliminating the need to transport manure to more distant cropland. Lagoons tend to be more cost effective in relatively cropland-scarce regions, such as the South and Southeast. In contrast, pit manure facilities, which conserve manure nutrients for use on cropland, emit less ammonia and are more cost effective in cropland-abundant regions such as the Midwest.

In the current environment with no ammonia emission restrictions in place, ERS estimates that large operations using lagoons have ammonia emissions of twice as much per animal and almost three times as much in total compared with large operations using pit systems.

In a scenario requiring lower ammonia emissions using currently available ammonia-abatement technologies—lagoon covers and manure slurry injection—ERS finds that all large hog farms would face higher costs, but the restrictions would cause a greater decline in profits for lagoon operations than for pit operations (12 percent versus 2 percent). Lagoon operations, however, would see a 36-percent drop in ammonia emissions, compared with a 7-percent drop for pit operations. The geographic distribution of large lagoon and pit operations implies that farms in the South and Southeast would face greater declines in profits but would generate larger reductions in air pollution than farms in the Midwest.

Lagoon operations are more responsive to a hypothetical ammonia restriction than pit operations

	Ammonia nitrogen emissions with no restriction		Ammonia nitrogen emissions with hypothetical restriction	
	Per hundredweight hog produced	Total	Per hundredweight hog produced	Total
	Pounds	*1,000 tons*	*Pounds*	*1,000 tons*
Large lagoon operations				
Manure storage facility	7.9	281.1	4.1	144.2
Field	0.5	16.3	1.3	44.9
Total	8.4	297.4	5.3	189.0
Large pit operations				
Manure storage facility	3.3	79.9	3.3	79.9
Field	0.9	20.9	0.6	13.7
Total	4.2	100.9	3.9	93.7

Note: Large hog operations (at least 1,000 animal units) with lagoon operations are shown to emit substantially more ammonia per unit and in aggregate than large pit operations as measured by estimated levels of ammonia per unit (pounds of ammonia nitrogen per hundredweight of hog produced) and the total ammonia produced nationally (1,000 tons of ammonia nitrogen).

Source: Economic Research Service calculations calibrated with data from the 1998 USDA-ARMS Hogs Production Practices and Returns Report.

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This finding is drawn from . . .

Managing Manure To Improve Air and Water Quality, by Marcel Aillery, Noel Gollehon, Robert Johansson, Jonathan Kaplan, Nigel Key, and Marc Ribaudo, ERR-9, USDA, Economic Research Service, September 2005, available at: www.ers.usda.gov/publications/err9/

Bob Nichols, USDA/NRCS

Use of Conservation-Compatible Practices Varies by Farm Type

Farm operators have an incentive to adopt environmentally friendly farming practices that can increase their profits, but they may be reluctant to use costly practices that benefit the environment but do little to improve their bottom lines. For that reason, USDA offers payments to farmers based on their adoption of designated conservation practices. Not all farmers, however, are equally motivated by conservation program payments.

Operators of small farms and those who derive most of their income from off-farm occupations are less likely to adopt practices that require extra time or expense. Operators of larger operations and those who have college degrees, receive commodity program payments, or seek professional advice on management decisions are more likely to adopt the management-intensive practices.

Some farm management practices that benefit the environment onfarm and off-farm have been widely adopted: conservation tillage, crop rotation, and use of insect-resistant and herbicide-tolerant plants. These **standard practices** require relatively little from farmers in terms of new equipment or additional skill. Farms of all types use these practices to conserve resources, save time, and reduce labor and input costs without incurring sizeable conversion costs.

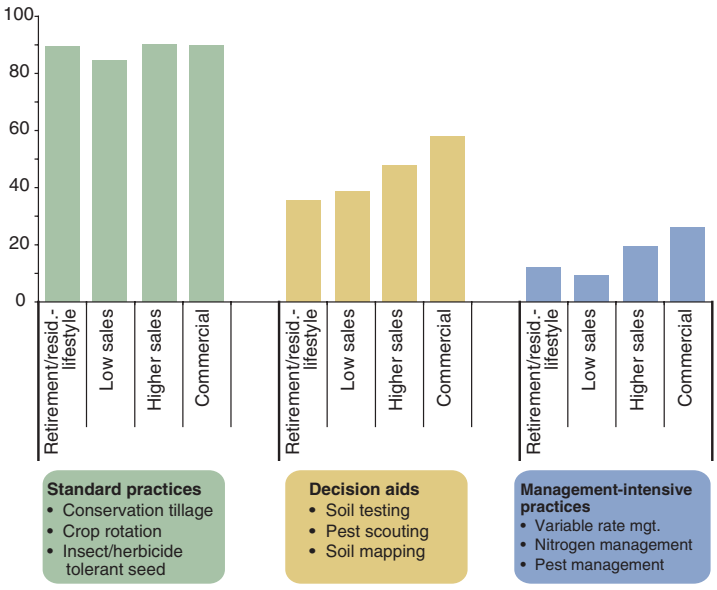
Adoption rates drop, however, with practices that require more management time or costly equipment upgrades. Farms that use **decision aids** (such as soil testing, pest scouting, and mapping) and more **management-intensive practices** (such as nutrient and pest management programs, and variable-rate input applications) must gather and process field-level information and use farming techniques that may be new. These practices have the potential to increase farm profits by optimizing the placement, application rate, and timing of fertilizers and pesticides, and they are more likely to be adopted by large farming operations than by smaller ones.

Nonfinancial motivations of farm operators may also help explain their tendencies to adopt conservation practices. For example, small farm operators heavily involved in off-farm activities may not have the time to devote to management-intensive practices.

These findings suggest that program incentives based solely on financial considerations may not be as effective or efficient as flexible incentive structures that recognize other farm operator goals.

Farmers differ in their willingness to adopt conservation-compatible practices

Percent of corn, cotton, and soybean farms in each type



Note: Retirement/residential-lifestye farms are small farms with sales <$250,000/year whose operator reports primary occupation as retired or nonfarm business; low sales farms are farms whose operators report farming as primary occupation, with sales <$100,000/year; higher sales farms are farms whose operators report farming as primary occupation, with farm sales between $100,000 and $250,000/year; commercial farms report sales more than $250,000/year. Nonfamily farms are excluded.

Source: 2001-2003 USDA Agricultural Resource Management Survey.

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This finding is drawn from . . .

Conservation-Compatible Practices and Programs: Who Participates? by Dayton Lambert, Patrick Sullivan, Roger Claassen, and Linda Foreman, ERR-14, USDA, Economic Research Service, January 2006, available at: www.ers.usda.gov/publications/err14/

FINDINGS

Eyewire

Home Financing: Rural-Urban Differences

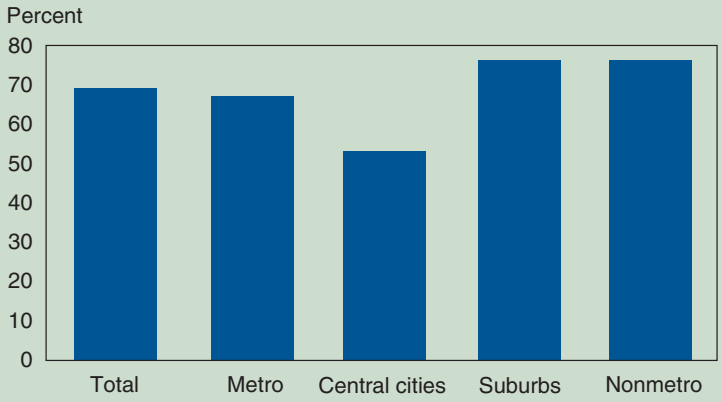
The homeownership rate in America is at a record high (69 percent of households). Whether in rural or urban areas, most home purchases are financed by a home mortgage. For rural homeowners, however, mortgage rates are often higher than for urban homeowners, and lenders may impose more stringent requirements for financing a rural residence.

According to data through 2004 from the Monthly Interest Rate Survey, the effective nonmetropolitan (nonmetro) interest rate on conventional fixed-rate home mortgages remains somewhat higher than the metro rate. However, the gap between nonmetro and metro rates has narrowed since 1995. This effect is mirrored by a growing convergence in the terms to maturity for rural and urban home mortgages. By 2004, the average term of nonmetro mortgages (26.4 years) had increased to almost the same average term as metro mortgages (26.9 years).

The apparent narrowing of differences in the cost of conventional home loans does not necessarily mean that rural and urban households have similar access to financing. Underwriting standards may make it more difficult to qualify for financing on a rural residence. For example, underwriters may not finance a rural mortgage if the prospective residence lacks a nearby water hookup for fire and emergency services. Also, a larger share of nonmetro residences consist of manufactured/mobile homes, which are generally financed by loans with shorter terms and much higher effective interest rates than those with conventional home mortgages. (In 2003, 14 percent of nonmetro and 5 percent of metro households lived in manufactured/mobile homes.)

Data from the 2003 American Housing Survey show that 13 percent of nonmetro homeowners and 21 percent of metro homeowners had primary mortgages either guaranteed or financed directly by the Federal Government. USDA and the U.S. Department of Housing and Urban Development are the primary Federal agencies providing housing assistance programs for low-income renters and owners. In rural America, USDA's section 502 single-family housing program promotes home purchases by providing (1) a reduced interest rate, direct-loan program restricted to low-income persons who cannot qualify for loans from private lenders, and (2) a loan-guarantee program that guarantees repayment of market-rate home mortgages made by private lenders to mostly moderate-income borrowers. Such programs can help mitigate some of the cost differences between rural and urban home financing.

U.S. homeownership rates vary by area of residence, 2004



Source: Census Bureau, Housing Vacancy Survey.

Carolyn Rogers, crogers@ers.usda.gov

This finding is drawn from . . .

The Rural Housing chapter of the ERS Briefing Room on Infrastructure and Rural Development Policy, www.ers.usda.gov/briefing/infrastructure/ruralhousing/

Bob Nichols, USDA/NRCS

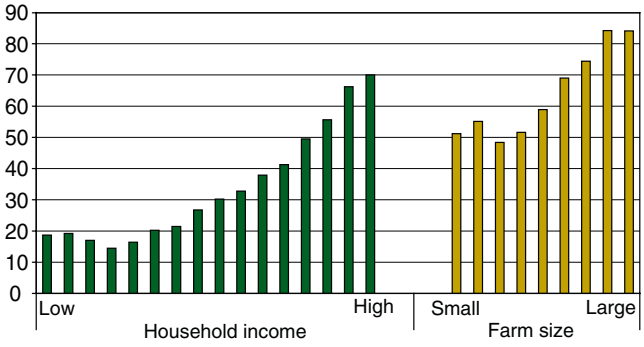
Internet on the Range

Over the last decade, the Internet has become a standard tool used in the workplace. Access to and use of the Internet has increased since the 1990s for all regions of the country, most types of workplaces, and all income groups. While many see the Internet as ubiquitous, it has not yet become universal. Rural areas lag urban areas in access to the Internet, and a gap is evident between farm and nonfarm workplaces.

According to data from the October 2003 Current Population Survey, 42 percent of all U.S. employees had access to the Internet at their workplace. Rural workers (31 percent) were less likely than urban workers (43 percent) to have access to the Internet. Among all employed persons, the likelihood of having access to the Internet rises with household income. More than 70 percent of workers with a household income greater than $150,000 had access to the Internet, but the percentage drops below 21 percent for workers with household incomes under $25,000. Within each household income group, rural workers were less likely than urban workers to have workplace Internet access.

In 2003, 60 percent of all U.S. households had a least one adult who used the Internet someplace, such as at work, school, home, or the library. The rate was 51 percent in rural households, compared with 62 percent in urban households. As would be expected given education's role in the determination of income, Internet use is greater with higher educational attainment. For households where the primary breadwinner has a college degree, Internet use is 81 percent—82 percent for urban and 76 percent for rural households. For households where no adult has graduated from high school, the rate drops to 39 percent—40 percent for urban and 33 percent for rural households.

Rural household and farm Internet access



Sources: Census Bureau, Current Population Survey; 2004 USDA Agricultural Resource Management Survey.

In rural areas, farms have been in the vanguard of Internet use in the workplace. According to data from USDA's Agricultural Resource Management Survey, 56 percent of farms reported having computers with Internet access in 2004. Twenty percent of those respondents used the Internet to purchase farm-related items and 29 percent used it to purchase household items. Internet use varied somewhat by geographic location of the farm household, with farms in small towns having the lowest share with Internet access. Differences in Internet use among farm households by farm sales, however, were striking. Internet use ranged from 49 percent for farms with sales of $10,000 to $19,999 to 84 percent for the largest farms (gross sales of $500,000 or more). The largest farms also had the highest share of individuals using the Internet to make both farm and household purchases, mirroring the pattern of all U.S. households.

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Mitch Morehart, morehart@ers.usda.gov

This finding is drawn from . . .

The ERS Briefing Room on Rural Telecommunications, www.ers.usda.gov/briefing/telecom/

Severity and Concentration of Persistent High Poverty in Nonmetro Areas

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The incidence of poverty is commonly used as an indicator of economic well-being for places or groups of people. But a simple dichotomy of poor versus not poor at a given time may conceal much that would broaden our understanding of poverty. For example, the poverty rate does not reveal the degree of severity or concentration of poverty, or the size of the population whose income is only marginally above the poverty level. Nor does it show whether an area's poverty level is an unusual and temporary condition or a longstanding pattern.

ERS defines counties as persistently high poverty areas if 20 percent or more of their population had poverty-level incomes in each of the four decennial censuses since 1970. The Census Bureau establishes the poverty threshold, which varies by the number and age of persons in a household and is adjusted from census to census to account for changes in the cost of living. The poverty threshold in the 2000 Census for a family of four, with two children under age 18, was an annual income of $16,895 in 1999. For an individual under age 65, the threshold was $8,667.

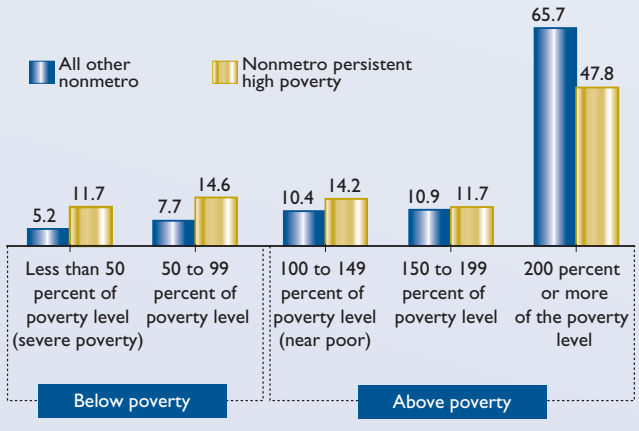
Areas of Persistent High Poverty

Of the 340 nonmetro counties with persistent high poverty in 2000, the overwhelming majority were in parts of the U.S. where poverty primarily reflects conditions among racial/ethnic minority groups or the predominantly White population of the Southern Highlands (mostly Allegheny and Cumberland Plateau counties of Kentucky and West Virginia, plus parts of the Ozark Plateau and Ouachita Mountains west of the Mississippi). These counties contained a fourth of the total nonmetro poverty population in 2000.

In the persistent high-poverty counties, 26 percent of the total population in 2000 were in households with incomes below the poverty line, with 12 percent in "severe poverty" (a term used to define those with incomes less than 50 percent of the official poverty threshold). Thus, nearly half of the poor in these counties were not merely poor but severely poor, even after accounting for any possible receipt of cash public assistance or Supplemental Security Income.

A corollary condition in persistent-poverty areas is that many persons with incomes above the poverty level had incomes only moderately above this threshold. Just 48 percent of the population in persistent high-poverty counties in nonmetro areas lived in households with incomes at least double the poverty threshold, compared with 66 percent in all other nonmetro counties. Thus, even among households with incomes above the poverty level in persistent high-poverty counties, there is a relative lack of households with incomes high enough to provide personal savings, local capital, or substantial consumer spending power.

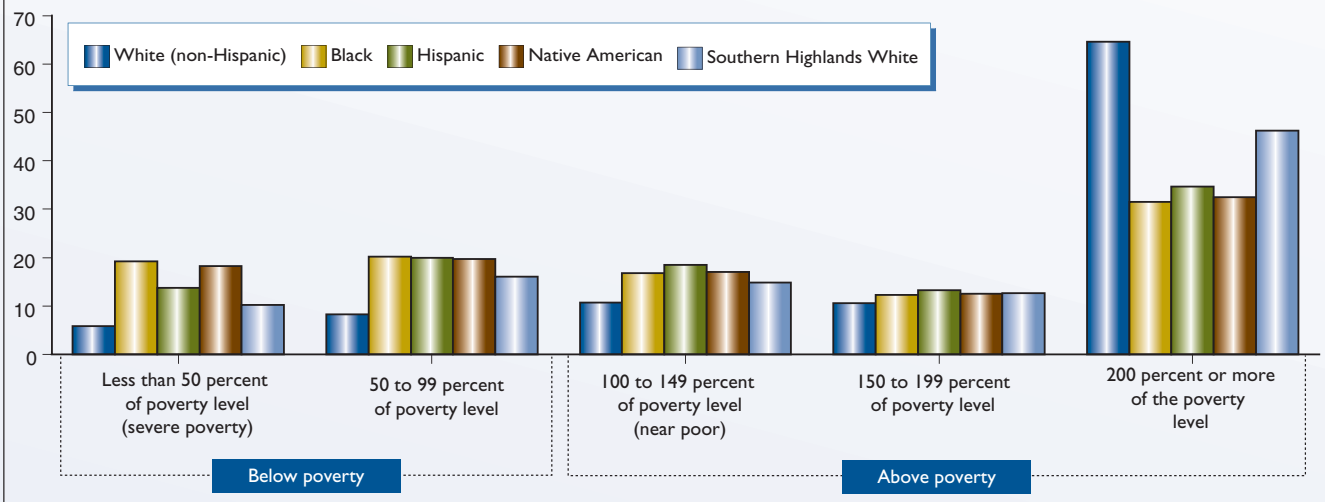
Less than half the nonmetro population in persistent high-poverty counties had incomes at least double the poverty threshold



Source: Prepared by USDA, Economic Research Service using data from the 2000 Census.

Minorities with incomes above the poverty threshold are more likely than non-Hispanic Whites to be near poor

Percent distribution of populations by ratio of income to poverty in nonmetro persistent poverty counties



Source: Prepared by USDA, Economic Research Service using data from the 2000 Census.

Although the characteristics of racial/ethnic minorities in persistent high-poverty counties vary from group to group, the incomes of these minority groups as a percentage of the poverty level are rather similar. The one notable exception is that Hispanics were less likely than Blacks or Native Americans to be severely poor, and they had a slightly higher inclusion at each income group above the poverty level. All three minority groups in persistent high-poverty nonmetro counties had overall poverty rates of 32-40 percent—more than double the U.S. nonmetro rate of 15 percent—with an additional 17-19 percent in "near poverty" (a term used to define those with incomes 100-149 percent of the poverty level).

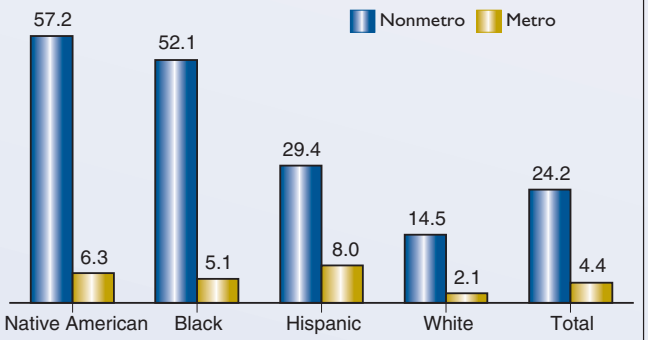
Concentration of Minority Poor

Among all nonmetro poor people, minority populations are much more likely than non-Hispanic Whites to be concentrated in areas where the overall poverty level is persistently high. Over half of all nonmetro poor Blacks and Native Americans live in such areas, as do nearly 30 percent of all poor Hispanics. But only a seventh of poor non-Hispanic White households live in a milieu of widespread and persistent poverty, notwithstanding the regional concentrations of White poverty in the Southern Highlands. Thus, the local economic and social context of poverty may be more difficult and limiting for the nonmetro minority poor than it is for poor non-Hispanic Whites.

The population of metro counties that have persistently had high poverty is smaller than that of chronically poor nonmetro counties (about 4.7 million versus 6.4 million). Because the total metro population is so large, the percentage of poor metro residents living in counties with persistently high poverty rates (4.4 percent) is much smaller than the percentage of nonmetro residents who live in persistent high-poverty counties (24.2 percent). The metro counties of Orleans Parish, LA (New Orleans), and El Paso County, TX, were the only counties of 400,000 or more people in 2000 that had persistent high poverty.

Over half of all nonmetro poor Blacks and Native Americans live in persistent poverty counties

Percent of poor in persistently poor counties



Source: Prepared by USDA, Economic Research Service using data from the 2000 Census.

This article is drawn from . . .

The County Typology page of the ERS Briefing Room on Measuring Rurality: www.ers.usda.gov/briefing/rurality/typology/

EU and U.S. ORGANIC MARKETS Face Strong Demand Under Different Policies

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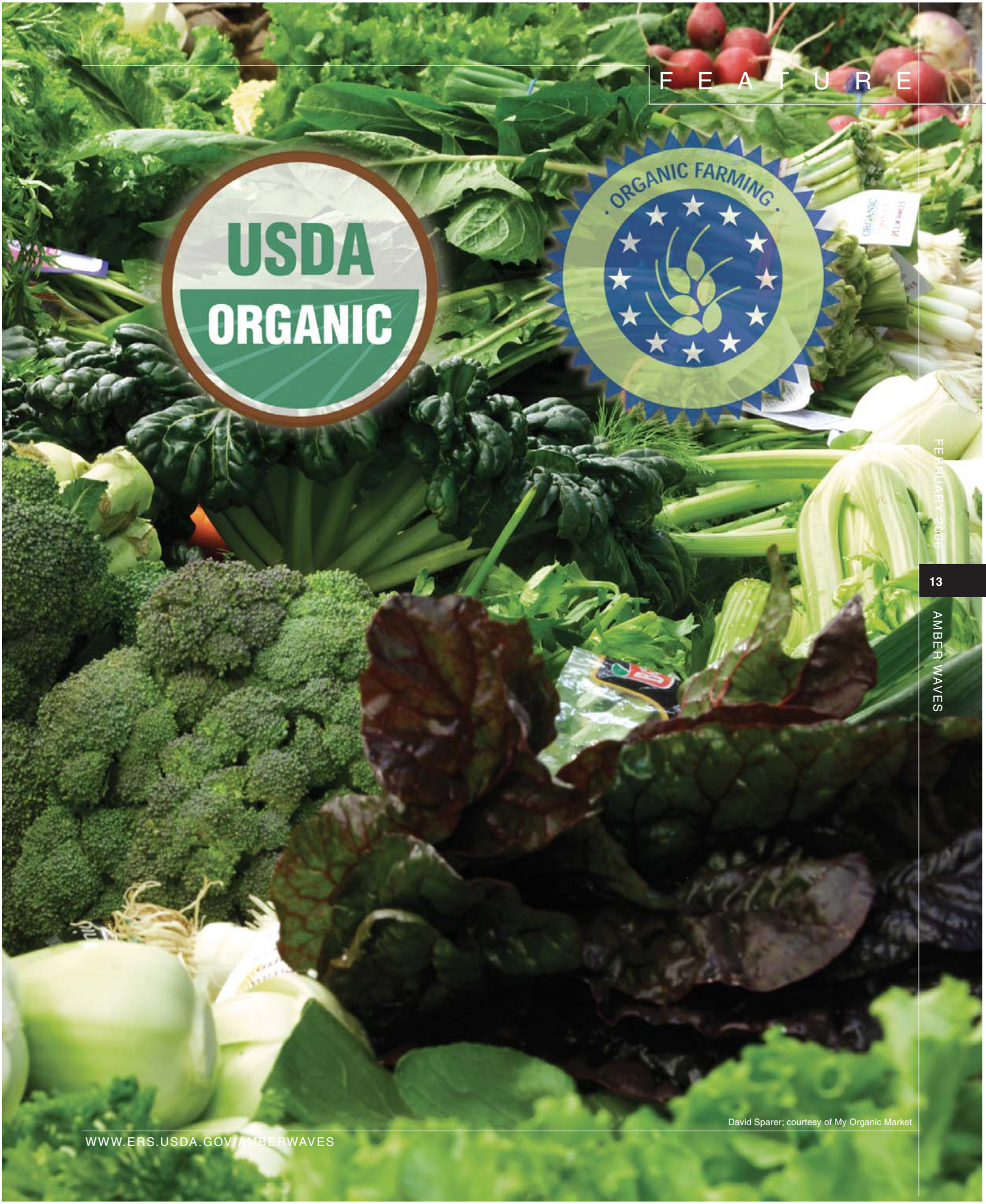
Organic markets in the European Union member states and the U.S. are nearly the same size in terms of retail sales. At the same time, their farm sectors differ significantly, with the EU-15 member states having more organic farmland and more organic operations than the U.S. (see box, "EU and U.S. Organic Sectors"). The U.S. and EU Governments have also adopted markedly different policy approaches to the organic sector. The EU actively promotes the growth of the organic sector with a wide variety of policies designed to increase the amount of land farmed organically, including government standards and certification, conversion and support payments for organic farmers, targets for land under organic management, and policies supporting research, education, and marketing. The U.S. largely takes a free-market approach: its policies aim to facilitate market development through national standards and certification and federally funded grants that support research, education, and marketing for organic agriculture.



David Sparer; courtesy of My Organic Market

The policy approaches adopted by the two regions are the result of the inherently dissimilar perspectives and histories that the EU and U.S. governments have concerning agriculture, the environment, and by extension, organic agriculture. From the perspective of many EU countries, organic agriculture delivers environmental and social benefits to society, and is regarded as an infant industry requiring support until it is able to compete in established markets. This view of organic farming as a provider of public goods affords an economic rationale for government intervention in the market.

The U.S. Government's approach, while acknowledging organic agriculture's positive impact on environmental quality, treats the organic sector primarily as an expanding market opportunity for producers and regards organic food as a differentiated product available to consumers. In such cases, government-devised standards and labels facilitate market transactions and allay consumer concerns about product identity.

EU and U.S. Adopt Organic Agriculture Standards and Certification

Both the EU and U.S. have established organic food standards, as well as systems that certify operations as organic. Such standards reduce transaction costs by ensuring that attributes of organic food do not have to be specified for each transaction. They also resolve an information problem since a product's "organic" status is unobservable to buyers, whereas the producer has knowledge of the production and handling methods.

Certification is a process providing third-party assurance that a product was raised, processed, and distributed appropriately, and meets the official organic standards. Thus, standards and certification work in tandem. Certification also reduces opportunistic behavior (such as falsely claiming a product is organic) by creating a specific enforcement system. In the U.S., penalties are clearly outlined for firms that use the organic label inappropriately, while the EU leaves enforcement up to individual member states.

In the EU, labeling of organic plant products is governed by EU Regulation 2092/91 (enacted in 1993); organically managed livestock is governed by EU Regulation 1804/99 (enacted in 2000). The regulations set minimum rules for production, labeling, and marketing for the whole of Europe, but each member state is responsible for interpreting and implementing the rules, as well as enforcement, monitoring, and inspection. EU labeling of organic products is complex because some member states have public labels, while private certifiers in other member states have their own labels, some well known to the public (e.g., KRAV in Sweden, Skal in the Netherlands, or the Soil Association in the UK). In addition, the EU introduced a voluntary logo in 2000 for organic products that could be used throughout the EU by those meeting

EU and U.S. Organic Sectors

The EU-15 countries (the countries that made up the EU prior to entry of 10 new countries in May 2004) are the focus of this article because much of the data on organic agriculture is on these countries. All references to the EU in this article refer to the EU-15: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom.

The EU and the U.S. together accounted for 95 percent of the $25 billion in world retail sales of organic food products in 2003. In 2003, retail organic sales in the EU, at almost $13 billion (€10 billion), exceeded the $10.4 billion (€8 billion) of U.S. sales. However, per capita retail sales were nearly equal, approximately $34 in the EU and $36 in the U.S.

The European organic markets are more mature than the U.S. market. The EU's organic sector—particularly Western Europe—had the fastest worldwide growth in the 1990s. Growth in organic retail sales, however, has slowed in some countries, with recent growth rates across the EU averaging 7.8 percent per year. Forecasts of annual growth for organic sales in the next few years range from 1.5 percent for Denmark to 11 percent for the United Kingdom. U.S. organic retail sales increased equally rapidly in the 1990s, averaging 20 percent per year, continued that pace well into 2005, and are predicted to grow 9-16 percent per year through 2010.

Certified organic land in the EU rose from 2.1 million hectares (5.2 million acres; 0.405 hectares = 1 acre) in 1997 to 5.1 million hectares in 2003, about 4 percent of total agricultural area. U.S. organic lands increased from 549,406 hectares in 1997 to 889,734 hectares in 2003—or 0.24 percent of all agricultural lands. Thus, in 2003, the EU had over five times the amount of organic farmland as the U.S., while the U.S. had three times as much total agricultural land.

The EU and the U.S. together accounted for 95 percent of the $25 billion in world retail sales of organic food products in 2003.

EU and U.S. organic sectors, 2003

Country	Retail sales	Organic operations	Organic land	Farmland under organic production
	Million euros	*Number*	*Hectares*	*Percent*
Austria	400	19,056	328,803	9.7
Belgium	300	688	24,000	1.7
Denmark	339	3,510	165,146	6.1
Finland	212	5,074	159,987	7.2
France	1,578	11,377	550,000	1.9
Germany	3,100	16,476	734,027	4.3
Greece	21	6,028	244,455	6.2
Ireland	40-50	889	28,514	0.7
Italy	1,400	44,039	1,052,002	6.9
Luxembourg	NA	59	3,002	2.4
Netherlands	395	1,522	41,865	2.2
Portugal	NA	1,507	120,729	3.2
Spain	144	17,028	725,254	2.8
Sweden	420	3,562	225,776	7.4
United Kingdom	1,607	4,017	695,619	4.4
European Union[1]	9,966	134,434	5,099,179	3.9
U.S.[2]	8,047	8,035	889,734	0.2

NA = Not available.

Note: U.S. retail sales dollars were converted to euros using an exchange rate of $1.29 = €1.00, May 2005.

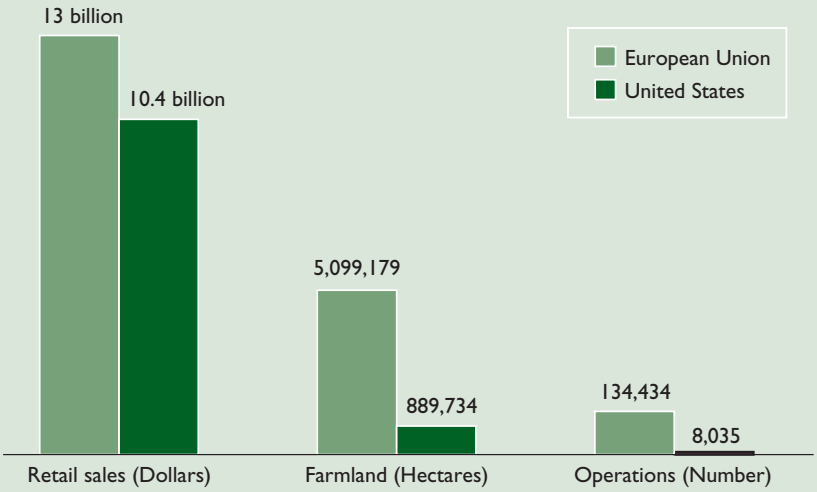
[1]Some EU land numbers are provisional. All EU hectares and farms are for certified organic and in-conversion land. Numbers for Sweden do not reflect the substantial hectares that are managed organically but not certified. In Sweden, these lands are given governmental support payments as recognition by Sweden and increasingly other Scandinavian countries that financially supporting organic land management for environmental gain does not necessarily need to be linked to the marketing of organic food, for which certification is a legal requirement. In Sweden, these lands accounted for another 180,000 hectares and an estimated 12,500 farms in 2003.

[2]The U.S. reports certified organic acreage, which has been converted to hectares (1 acre = 0.405 hectares.). The U.S. does not report farms or acreage in transition to organic production, as does the EU, and does not report subcontracted organic growers.

Sources: Various sources, cited in *Market-Led Versus Government-Facilitated Growth: Development of the U.S. and EU Organic Agricultural Sectors*, by Carolyn Dimitri and Lydia Oberholtzer, WRS-05-05, USDA, Economic Research Service, August 2005, available at: www.ers.usda.gov/publications/wrs0505/. U.S. operation and land numbers for 2003 are available at: www.ers.usda.gov/data/organic/

David Sparer; courtesy of My Organic Market

EU and U.S. organic sectors, 2003: Retail sales are similar, but EU organic farmland area and operations exceed those of the U.S.



See sources and notes from table: EU and U.S. organic sectors, 2003.

the regulation. So far, few companies are using the logo. Most recently, in December 2005, the European Commission made compulsory the use of either the EU logo or the words "EU-organic" on products with at least 95 percent organic ingredients.

In the U.S., the 1990 Organic Foods Production Act (OFPA) required that USDA establish national standards for U.S. organic products. The three goals of OFPA were to (1) establish standards for marketing organically produced products, (2) assure consumers that organic products meet a consistent standard, and (3) facilitate interstate commerce. The legislation targeted environmental quality by requiring that an organic production plan pay attention to soil fertility and regulate manure application to prevent water contamination. It also included environmental and human health criteria to evaluate materials used in organic production. Along with the USDA organic logo, the USDA National Organic Standards (NOS) were implemented on October 21, 2002, replacing the prior patchwork system of State organic standards.

Both the EU and U.S. rely on accredited agents to certify organic farmers and handlers. The EU system is more complicated, largely because member states have some latitude as to how they approve and supervise certifying entities, resulting in a great deal of diversity among the states. A national authority from each member state certifies that organic products comply with EU law. These bodies, in turn, approve other entities that are allowed to certify organic production and handling processes. Most member states have government-approved private certification bodies, but some have public member state certification. In addition, some member states and certifiers have additional public or private standards, as well as standards for products not covered under the EU Regulation, such as fish and nonfood agricultural products. Some certifiers require stricter standards than those of the EU legislation. As a result, not all EU certificates are acceptable to each certification body. In contrast, in the U.S., agents are accredited by USDA to carry out organic certification, and the certification process is well defined so that all farmers and handlers are certified according to the same standard.

The EU, Unlike the U.S., Subsidizes Organic Production

European governments (including countries not in the EU, such as Switzerland) support organic agriculture through *green payments* (payments to farmers for providing environmental services) for converting to and continuing organic farming. The economic rationale for these subsidies is that organic production provides benefits that accrue to society and that farmers lack incentives to consider social benefits when making production decisions. In such cases, payments can more closely align each farmer's private costs and benefits with societal costs and benefits.

EU green payments partly compensate new or transitioning organic farmers for any increase in costs or decline in yields in moving from conventional to organic production, which takes 3 years to complete.

EU support for organic agriculture falls under the EU's general agri-environment program that is part of the Common Agricultural Policy (CAP). The EU commission establishes the general framework and co-financing, and each member state chooses a set of policies from this menu of measures. The 1992 CAP reform (EC Regulation 2078/92) provided the policy framework for EU member states to support organic farming, and many of the payments currently granted were implemented under this reform, dating back to 1994. More recently, under Agenda 2000, these measures were included in the rural development program (Rural Development Regulation No. 1257-99), a CAP reform carried out from 1999 to 2001. In 2001, the EU-15 spent almost €500 million ($559 million; the average annual exchange rate for 2001 was $1 = €0.895) on organic

lands under the two measures, with organic farms receiving average payments of €183-€186 ($204-$208) per hectare, compared with €89 ($99) per hectare paid to conventional farms.

Many EU Member States Set Targets for Organic Land . . .

Many EU member states have established targets for the share of farmland under organic production in their organic farming action plans. The EU governments use targets to convey their level of commitment to growth in the organic sector. Some countries have selected relatively attainable targets, while others have chosen more ambitious ones. For example, in 1995, Denmark announced a target of 7 percent of farmland certified as organic by 2000 and nearly reached this goal with 6 percent. Denmark's goal of having 12 percent of farmland certified as organic by 2003, however, fell short. In response to the 2000 Bovine Spongiform Encephalopathy (BSE) crisis, Germany set a target of certifying 20 percent of farmland as organic by 2010, a number that may be hard to reach since only 4 percent of land was in organic production in 2003.

. . . and Higher Funding for Research

Public funding of organic-related research and programs is increasing in both the EU and U.S., although European governments are financing more programs with a broader range. European funding supports innovation in production techniques, food processing, food marketing, and food retailing, and is estimated at €70-€80 million annually from 2003 to 2005. Germany, the Netherlands, Switzerland, and Denmark accounted for 60 percent of this. In fiscal year 2005, the U.S. Government made approximately $7 million available exclusively for organic programs, including a certification cost-share program and $4.7 million for a research grant program. This amount is supplemented by other programs that benefit organic producers, including funding for organic research and technical assistance by Federal, State, and local agencies that focus on organic agriculture.

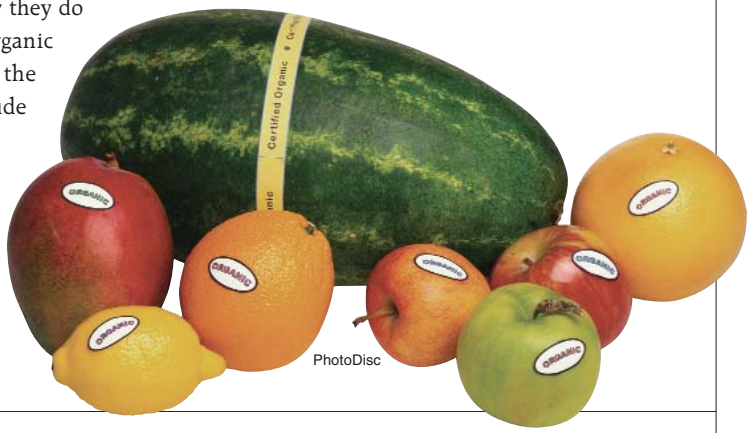
Studies indicate that most European consumers have shifted from buying organic food for altruistic reasons to more self-interested reasons, such as food safety and health.

Consumers in Both Regions Drive Market Growth

In many ways, development of the EU and U.S. organic markets has followed a similar path. In the early days, the organic sectors were supply driven and organic products were introduced by farmers. More recently, consumers have been the driving market force in both regions. Studies indicate that most European consumers have shifted from buying organic food for altruistic reasons to more self-interested reasons, such as food safety and health. Ranking behind these are taste, nature conservation, and animal welfare. Similarly, U.S. consumers 20 or more years ago bought organic food because of their concern for the environment. In 2002, according to national surveys, two-thirds of U.S. consumers cited health and nutrition as a reason for buying organic, followed by taste, food safety, and the environment.

Consumers in both regions offer similar reasons for why they do not purchase organic food. In Europe, the main factors include high prices, poor product distribution, little obvious difference in quality, lack of information on the nature of organic products, and doubts about the organic integrity of the items. In the U.S., according to consumer surveys, price leads the list of barriers to purchasing organic products, followed by availability of organic products. Despite these factors, retail sales are growing rapidly in both regions.

In 2003, U.S. organic food sales were distributed almost evenly between natural product/health food stores (47 percent) and conventional retail stores (44 percent), with direct sales and exports accounting for 9 percent. This is a significant shift from 1998, when corresponding sales were 63 percent, 31 percent, and 6 percent. As in the U.S., mainstream European supermarkets in some countries stock a wide range of organic products. However, the main type of retail channel for organic food varies across countries. Over 85 percent of organic products are sold through general food shops in Denmark; in Luxembourg and Greece, organic foods are primarily sold through other stores (e.g., organic/health food stores, bakers, and butchers). In a number of countries, including Ireland, Italy, France, Belgium, the Netherlands, and Germany, sales are more evenly divided between supermarkets and other stores.



EU agri-environmental support and organic farming, 2001

Country	Organic land supported under agri-environmental programs[1]		Share of organic land in policy support programs	Public expenditure for support of organic land under 1992 CAP reform	Average support premium for organic land	
	1992 CAP reform	Agenda 2000			1992 CAP reform	Agenda 2000
	Hectares		*Percent*	*Thousand euros*	*Euros/hectare*	
Austria	36,193	210,833	89	67,905	211	286
Belgium	13,032	3,616	74	3,416	187	269
Denmark	79,731	78,347	94	16,377	137	199
Finland	23,948	113,631	93	3,402	141	117
France	54,727	82,508	33	23,951	196	188
Germany	278,884	254,715	84	84,477	154	163
Greece	4,928	10,614	50	17,505	401	445
Ireland	13,691	NA	46	1,848	135	NA
Italy	351,113	101,134	37	158,898	361	318
Luxembourg	736	1,224	98	328	158	173
Netherlands	8,140	14,593	63	4,446	266	156
Portugal	26,970	90	38	3,779	137	111
Spain	142,591	112,554	53	14,544	69	195
Sweden[2]	81,067	349,562	113	69,018	153	162
UK	285,633	122,330	60	27,591	42	45
European Union	1,401,384	1,455,751	62	497,485	186	183

NA = Not available.

Courtesy of Organic Milk Suppliers Cooperative

[1]Organic support falls under EC Regulation 2078/92, the agri-environmental program of the 1992 Common Agricultural Policy reform. After 1999, organic farming support was part of Rural Development Regulation 1257/97, under Agenda 2000.

[2]Sweden's 113 percent signifies that there is more policy-supported organic land than certified area, reflecting the country's policy of supporting uncertified organically managed lands (see note to table: EU and U.S. organic sectors, 2003, on page 15).

Sources: Various sources, cited in *Market-Led Versus Government-Facilitated Growth: Development of the U.S. and EU Organic Agricultural Sectors*, by Carolyn Dimitri and Lydia Oberholtzer, WRS-05-05, USDA, Economic Research Service, August 2005, available at: www.ers.usda.gov/publications/wrs0505/.

David Sparer; courtesy of My Organic Market

Although the organic market is growing in both the EU and the U.S., there are some problems with the flow of products to market. In Europe, the organic dairy and livestock industries, in particular, have grown rapidly over the last decade, and in some cases have outpaced the capacity of the market and distribution channels. Organic milk supplies in some regions were large enough to reduce organic prices, causing some producers to exit the sector because they were unable to turn a profit. The milk glut, however, appeared to be giving way to shortages in the UK, as demand continues to grow and supply has declined. The U.S. organic food market was formerly supply constrained, but now seems better able to meet consumer demand, especially for fresh produce. In the dairy market, however, with demand increasing rapidly, suppliers are struggling to provide enough organic milk to satisfy demand at current prices.

EU CAP Reform Renews Support for Organic Farming

In June 2004, the European Commission adopted an Action Plan for Organic Food and Farming, with 21 policy actions aimed at facilitating ongoing developments in the organic sector. The actions are focused on three main areas: information development (e.g., increasing consumer awareness, improving statistics on organic production and demand); encouraging member states to apply a more coherent approach and to make better use of the different rural development measures; and improving/reinforcing the EU's organic farming standards and import/inspection requirements.

The 2003-04 CAP reforms partially shift agricultural policy toward a market-driven policy and convert the current system of direct payments to a single-farm payment independent of the volume of production. The single-farm payments began in 2005, with member states having discretion in implementing them. The farm payment will require cross-compliance with a wide range of standards, including environmental, food safety, animal welfare, and occupational health/safety. While the impact on organic agriculture is still unknown, the overall changes are expected to favor an expansion of organic farming.

This article is drawn from . . .

Market-Led Versus Government-Facilitated Growth: Development of the U.S. and EU Organic Agricultural Sectors, by Carolyn Dimitri and Lydia Oberholtzer, WRS-05-05, USDA, Economic Research Service, August 2005, available at: www.ers.usda.gov/publications/wrs0505/

The ERS Briefing Room on Organic Farming and Marketing, www.ers.usda.gov/briefing/organic/

The World Bids Farewell to the Multifiber Arrangement

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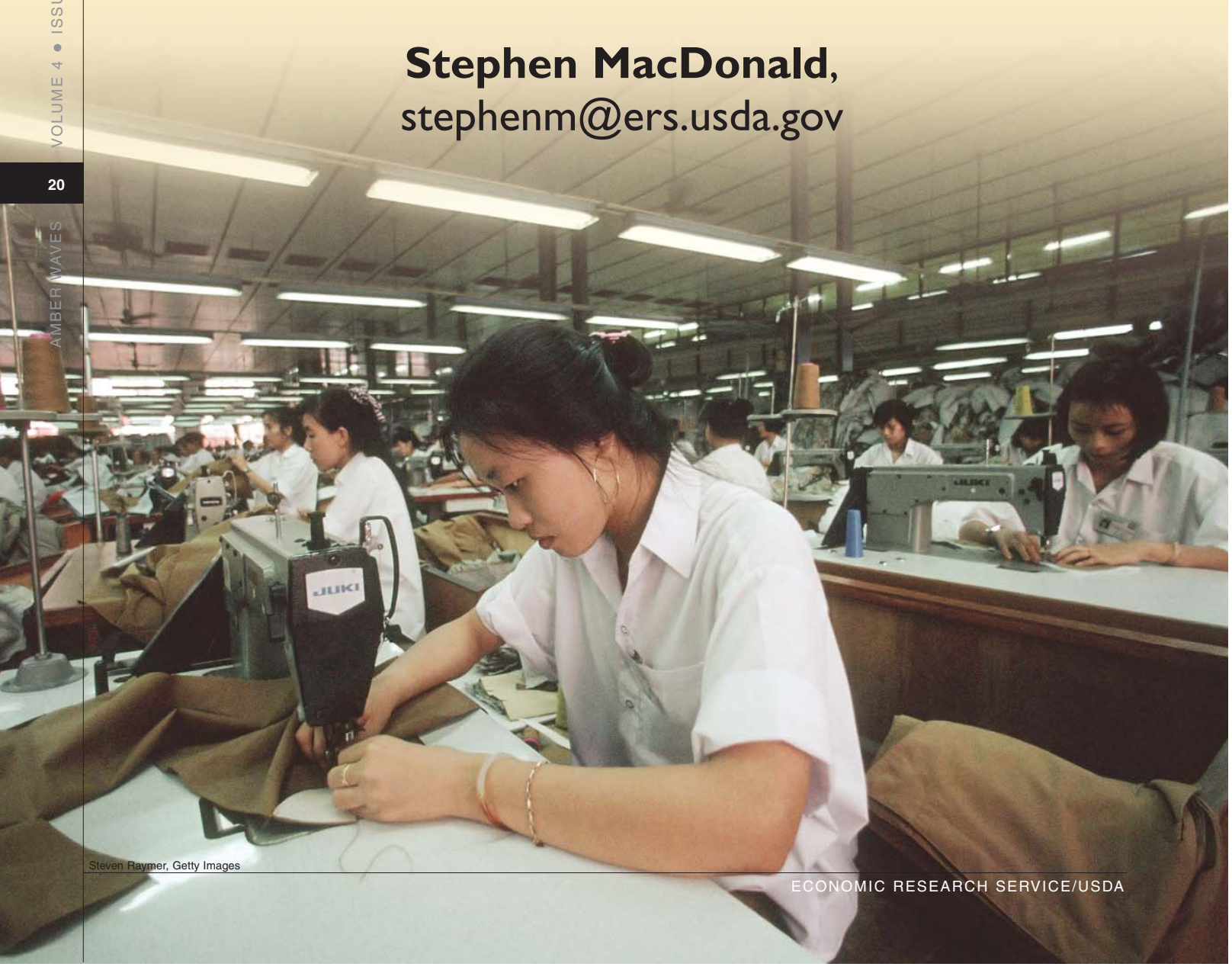


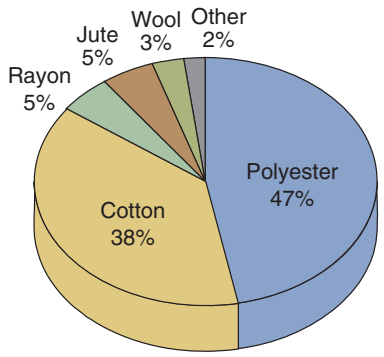
Steven Raymer, Getty Images

Clothing is one of life's necessities, so a new trade policy that lowers clothing prices affects us all. Such a change took place at the beginning of 2005, as the U.S., Canada, and the European Union (EU) discontinued most of their limits on imports of yarn, fabric, and clothing from developing countries. Under the Multifiber Arrangement (MFA), trade in textiles—that is, yarn and fabric—and clothing was managed through quotas. January 1, 2005, marked the end of a 10-year phaseout of the MFA quotas under the aegis of the World Trade Organization. This article examines the origins and spread of quotas under the MFA and the impacts of their subsequent elimination.

What Was the MFA?

The MFA was a multilateral agreement signed in 1974, but its roots stretch back to the 1930s. At that time, during a period of global economic distress, Japan emerged as the largest exporter of cotton textiles, and the U.S. and Europe moved to limit imports from Japan to preserve their domestic markets for their own textile industries. These restraints never really went away. By the 1960s, they had been extended to Hong Kong, Pakistan, and India. As the restraints on textile trade became globalized, multilateral negotiations ensued, leading to a series of agreements. Initially, the agreements covered only cotton, but they eventually expanded into "multifiber" arrangements covering textiles and clothing made from all fibers: cotton accounts for about 38 percent of world fiber consumption.

World fiber consumption, 2000 (50 million tons)



Sources: International Cotton Advisory Committee and Food and Agriculture Organization of the United Nations.

At the heart of the MFA were a set of bilateral agreements between developed-country importers, such as the U.S., and developing-country exporters, such as China and Bangladesh. The MFA did not apply to trade among the developed countries. The number of U.S. bilateral export restraint agreements grew from a single agreement with Japan in 1962 to agreements with 30 countries by 1972 and with 40 by 1994. Each agreement governed trade in as many as 105 categories of textiles and clothing, with new categories added to the agreements as the need to avoid "market disruption" arose.

In one sense, the impact of the MFA was quite simple. By limiting imports, the U.S. and the EU raised their domestic prices of clothing. Domestic production rose, and domestic consumption fell. Outside of these two markets, however, the effects were more complex, as the restraints on one set of countries created opportunities for others, driving changes in world clothing markets. Limits on exports by Japan and Hong Kong increased export opportunities for Taiwan and South Korea. Restraints then imposed on Taiwan and South Korea increased opportunities for Thailand and Indonesia. In this way, the MFA grew, but investment in clothing production also spread. Entrepreneurs from countries limited by the MFA shifted capital and expertise to countries that otherwise lacked the ability to export significant amounts of clothing. So, for some countries, the attempt to limit global exports actually spurred an increase in exports.

Another twist to the MFA's impact came from the North American Free Trade Agreement (NAFTA) and from similar regional trade arrangements between the EU and its neighboring countries. Typically, these agreements relax or remove the quota restrictions on neighboring exporters. Examples include

Mexico in the case of the United States, and Turkey and other Mediterranean countries for the EU. In this way, Mexico and Turkey benefited indirectly from the MFA's restraints on their competitors.

Case Study: U.S. Imports of Cotton Trousers

To understand the global impact of the MFA, it is useful to take a closer look at U.S. imports of one particular product—cotton trousers. The distribution of U.S. quotas and trade for cotton trousers illustrates the evolution of the MFA and global clothing trade during the 30 years that the MFA governed world trade and helps us understand the changes in store for global trade now that the MFA is behind us.

About 80 percent of the 180 million dozen cotton trousers purchased annually in the U.S. are imported, approximately the same as for most U.S. clothing and for clothing in most developed countries. In 1974, in contrast, imports accounted for 10 percent of U.S. consumption. The geography of that trade has also changed dramatically over the last three decades. Once, Japan was a major clothing exporter to the U.S, but Japan now imports most of its clothing. Other lower income countries have taken its place as suppliers of U.S. trousers. The fundamental reason for this shift is that labor comprises a much larger share of the cost of clothing than it does for most manufactured products. Wages in China are one-tenth those in the U.S, and wages for textiles and clothing workers in India and Bangladesh are half those in China. Wages are only one factor in determining competitiveness, and the superior infrastructure and education of the developed countries were traditionally able to offset lower wages. But this advantage has tended to erode over time as communication and transportation costs have fallen, and developing economies have become more integrated into the world economy.

U.S. cotton trouser imports[1]

Source	MFA quota 2004	Quota fill rate	Imports 2004	Import growth 2005[2]
	Million dozen pair	*Percent*	*Million dozen* pair	*Percent*
World	NA	NA	149.3	15
Mexico	NA	NA	31.4	-10
Hong Kong	7.0	88	6.1	-3
Guatemala	3.3	80	2.7	-17
Bangladesh	4.5	85	3.8	99
China	2.4	84	2.0	1,094
India	1.5	96	1.4	100
Taiwan	1.5	70	1.1	-2
Kenya	NA	NA	3.1	0

NA=Not available.
[1]MFA category 347/348.
[2]2005 figures based on 9 months of data.
Sources: Office of Textiles and Apparel, U.S. Department of Commerce and U.S. Customs and Border Protection.

The global economy has proven to be more dynamic than the political economy of protectionism, and the rigidity of the system of managed trade has had some unexpected consequences. In 2004, for example, Taiwan and India, two very different countries, had nearly identical quotas for cotton trouser exports to the United States—around 1 million dozen pairs each. While not as advanced as Japan's, Taiwan's economy long ago graduated from a focus on textiles to more sophisticated, higher value products. Competing for resources with higher paying industries in Taiwan, Taiwan's trouser producers were no longer able to export as many trousers as permitted under its quota. Taiwan's exports of cotton trousers filled 70 percent of its allocated quota in 2004, while India filled 96 percent of its quota.

As a result, in 2004, the MFA was indirectly protecting the industry of a former U.S. competitor—Taiwan—while India's quota, which reflected India's competitive stature of at least a decade before, was frozen in time. As the MFA coalesced during the 1970s and 1980s, India's economic policies encouraged a textile industry geared to providing employment to village handweavers and providing low-cost cotton cloth to its own population. India's exports were generally anemic during that period, and its MFA quotas often went unfilled. Since the beginning of the 1990s, however, India's economy has been dramatically reoriented toward exports, and India's export capacity has surged. As a result, India's exports of other textile products have grown, and it is well positioned to take advantage of the MFA's phaseout. However, before the end of

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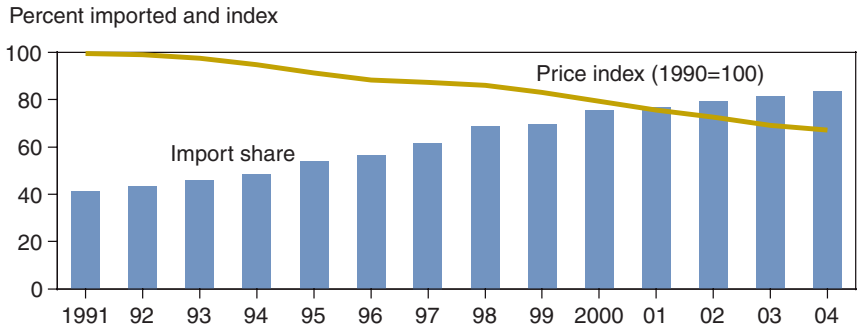
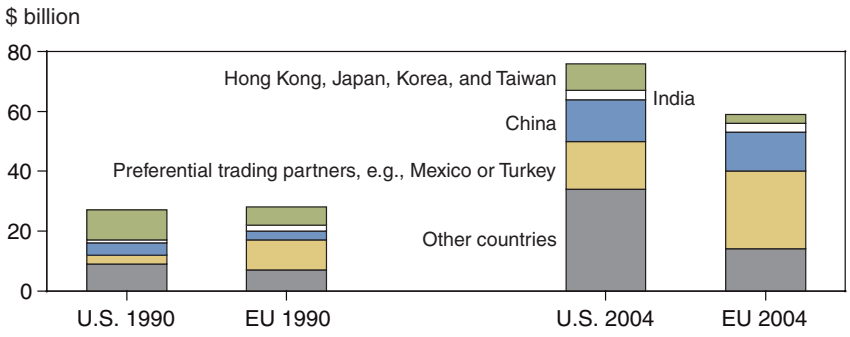
Clothing prices and imports in the U.S., 1991-2004



Sources: Bureau of Labor Statistics, U.S. Department of Commerce, and USDA.

Sources of imported clothing, U.S. and the EU, 1990 and 2004



Source: United Nations.

MFA, its access to the U.S. market for numerous products was encumbered by the outcome of negotiations concluded many years before.

China's 2004 quota for cotton trouser exports to the U.S was about double India's—2 million dozen pairs—reflecting the rapid growth of China's industry at the time the MFA restrictions on this product crystallized. But China accounted for only 1 percent of U.S. cotton trouser imports. China accounted for about 25 percent of world textile and clothing exports in 2004, and with the end of the MFA, this is expected to grow. But, when China began reorienting its economy in 1979, its textile industry, like India's, was domestically oriented. Exports began rising sharply. By September 1980, China and the U.S had negotiated their first bilateral textile agreement. China's cotton trouser quota has remained essentially fixed since the beginning of the 1980s, while China's textile industry has grown to be the world's largest by moving into other products and other markets.

Another explanation for China's low share in U.S. cotton trouser imports is the role that preferential trade agreements have played in U.S. textile trade. Although much of U.S. trade in cotton trousers was shaped by the MFA, over half of the 149 million dozen cotton trousers imported by the U.S. in 2004 were imported outside the MFA. Most of those imports came from neighboring countries, the result of preferential access granted through NAFTA, the Caribbean Basin Initiative (CBI), and the Andean Trade Preference Act. Mexico's 31 million dozen pairs of exports were exempt from a specific quota. While Guatemala exported 2.7 million dozen pairs under quota in 2004, its exports outside the quota system were even larger thanks to its preferential access.

Like NAFTA and the CBI, the African Growth and Opportunity Act (AGOA) of 2000 granted preferential access as a form

of economic aid to low-income African countries. This agreement allowed Kenya, Lesotho, and more than 30 other African countries to export cotton trousers and other products to the U.S. outside the MFA quota system. The passage of AGOA attracted investment and expertise—mostly from Asian firms—to these countries' textile and clothing sectors. Kenya's cotton trouser exports to the U.S rose from 287,000 dozen pairs in 1998 to 3.1 million in 2004, and Kenya garnered a 2-percent share of U.S. imports, twice that of China. In this way, the MFA indirectly encouraged clothing production in new corners of the world. In the 1970s, Hong Kong firms moved resources to Mauritius as quota restraints became binding. In the 1980s, South Korean entrepreneurs began investing in Bangladesh. The end of the quota system has removed some of the incentives to invest in a number of these countries, and their economies are having to adjust to a lower level of clothing exports and employment.

Short-Term Outlook for the Post-MFA World

Most economists analyzing the MFA agree that free trade in textiles and clothing will mean significantly larger exports by China, India, and Pakistan (Pakistan filled 100 percent of its cotton trousers quota in 2004). Higher income exporters like Taiwan, Korea, and Hong Kong can expect to export less. The same is true of countries with preferential access to the U.S. and EU markets. U.S. imports of cotton trousers in 2005 bear out these expectations. During the first 9 months of 2005, U.S. imports rose 15 percent, but imports from Mexico, Guatemala, Sub-Saharan Africa, Hong Kong, and Taiwan fell. On the other hand, imports from India rose 100 percent, and imports from China rose 1,094 percent.

Not all of China's clothing exports are expected to increase by 1,000 percent.

China Leads World Textile Trade, But For How Long?

Today, many of the questions about the future of international textile trade, policy, and consumption revolve around China. The expansion of China's textile production and exports has seemed relentless. The textile industry was among the first to benefit from China's opening to the rest of the world at the end of the 1970s. China's clothing producers are well positioned to coordinate with the design and management capabilities of Hong Kong. They have ready access to high-quality fabric produced in countries like Japan, as well as to their own burgeoning domestic production.

China's role in global textile trade may be constrained in the short term by the special safeguard provisions of its 2001 accession to the WTO. These safeguards, which will remain applicable through 2008, can limit China's export growth in specific products to a 7.5-percent annual rate. The United States applied these safeguards to a few products in 2003. Turkey and Argentina implemented broader sets of safeguards immediately after the end of the MFA, and Brazil has announced its intention to restrict textile imports from China. In May 2005, the United States applied safeguard provisions to cotton trousers, cotton shirts, and underwear. In 2004, the EU took steps to raise the tariffs it applies to clothing imports from China, and in June 2005, announced restrictions for 10 products imported from China. The United States and the EU each subsequently negotiated new bilateral textile trade agreements with China in 2005, which could limit China's exports to these markets through 2008.

China also has longer term pressures. During the last few years, reports of rising wages in China have emerged, particularly for the Pearl River Delta near Hong Kong. Electrical power shortages are also reportedly more frequent, suggesting rising costs in more than one respect. While China is unquestionably the global leader today, leadership in global textiles has shifted from one country to another over the centuries. Before the Industrial Revolution, India's cotton textiles dominated world trade. Later, England and then Japan and Hong Kong rose to prominence. In the long run, the only certainty is change, and China will have to face this issue as well.


Painet

Analysts expect gains of 20-100 percent in China's total clothing exports. Based on the cost of purchasing an export license from China to the United States, economists estimate that the impact of the MFA on China's trade was equivalent to a 20- to 30-percent import tariff. Similar estimates for other exporters tend to be lower, and the changes in 2005 U.S. cotton trouser imports confirm this pattern. While China's wages may exceed those in some other countries, its superior infrastructure helps ensure more timely delivery and higher productivity.

China's export gains will be constrained in the short term by the "safeguard" mechanism permitted under its 2001 WTO accession agreement. WTO members have the right under certain circumstances to limit growth in their textile imports from China through 2008. To limit the disruption of ad hoc safeguard applications, the U.S. and the EU reached bilateral agreements with China in 2005. These agreements govern textile trade very much the way the MFA did, albeit for a smaller number of products and with a higher level of imports. Furthermore, none of the other WTO exporters formerly constrained by MFA quotas faces any such restraint (see box: "China Leads World Textile Trade, But For How Long?").

For the U.S. and EU, the removal of the 20-percent or so implicit tax the MFA imposed on much of their imported clothing has led to increases in clothing imports by both regions. Domestic clothing prices can be expected to fall 5-10 percent, once production and consumption adjust to a new equilibrium. As clothing imports rise, the mix of exporters and products will change. The U.S. and EU can also expect to see increased availability of lower quality clothing. The experience of voluntary export restraints in automobiles, footwear, and steel during the 1980s attests to the "quality-upgrading" exporters undertake in the face of quotas.

PhotoDisc

Quotas create opportunities for unusually high profits, and the resulting welfare-reducing inefficiencies include a shift to more expensive lines of products.

Many Sources of Uncertainty in the Long Term

The elimination of the MFA will lead to longer term structural changes in the global textile industry, and these are harder to predict. The pursuit of profits under the MFA introduced inefficiencies in clothing production, which may require time to eliminate. Firms in many developing countries were structured to acquire quota and then maximize the profits from this quota rather than simply to compete in the marketplace. Similarly, U.S. and EU importers pursued the "excess profits" inherent in a quota system and, by some measures, succeeded in capturing a significant share. These factors are difficult to measure and add uncertainty to the outlook for the post-MFA world.

Another source of uncertainty is that the elimination of the MFA did not occur in isolation. Other forces, such as the depreciation of the U.S. dollar and technological change, may also affect textile and clothing trade. In the United States, a weakening dollar would tend to put upward pressure on clothing prices, perhaps offsetting the downward pressure exerted by the removal of the quotas. Moreover, clothing prices around the world have fallen in recent years as globalization and technical change increased trade and reduced distribution costs. The exchange of point-of-sale information ("electronic data interchange") between retailers and manufacturers has reduced inventory costs substantially, and the rise of discount retailing has been a global phenomenon. With so many other changes taking place in the global economy, it is hard to predict exactly the most important shifts consumers will face in the immediate aftermath of the MFA.

Furthermore, the MFA was far from being the only trade policy instrument relevant to global textile trade. Tariffs on textiles and clothing are typically several times higher than the 4-percent global average for manufactured products. Antidumping cases have been pursued around the world with increasing frequency. Many countries apply nontariff barriers to textile and clothing imports. Finally, the high labor component of clothing production helps make it a sensitive industry in the eyes of many governments.

This article is drawn from . . .

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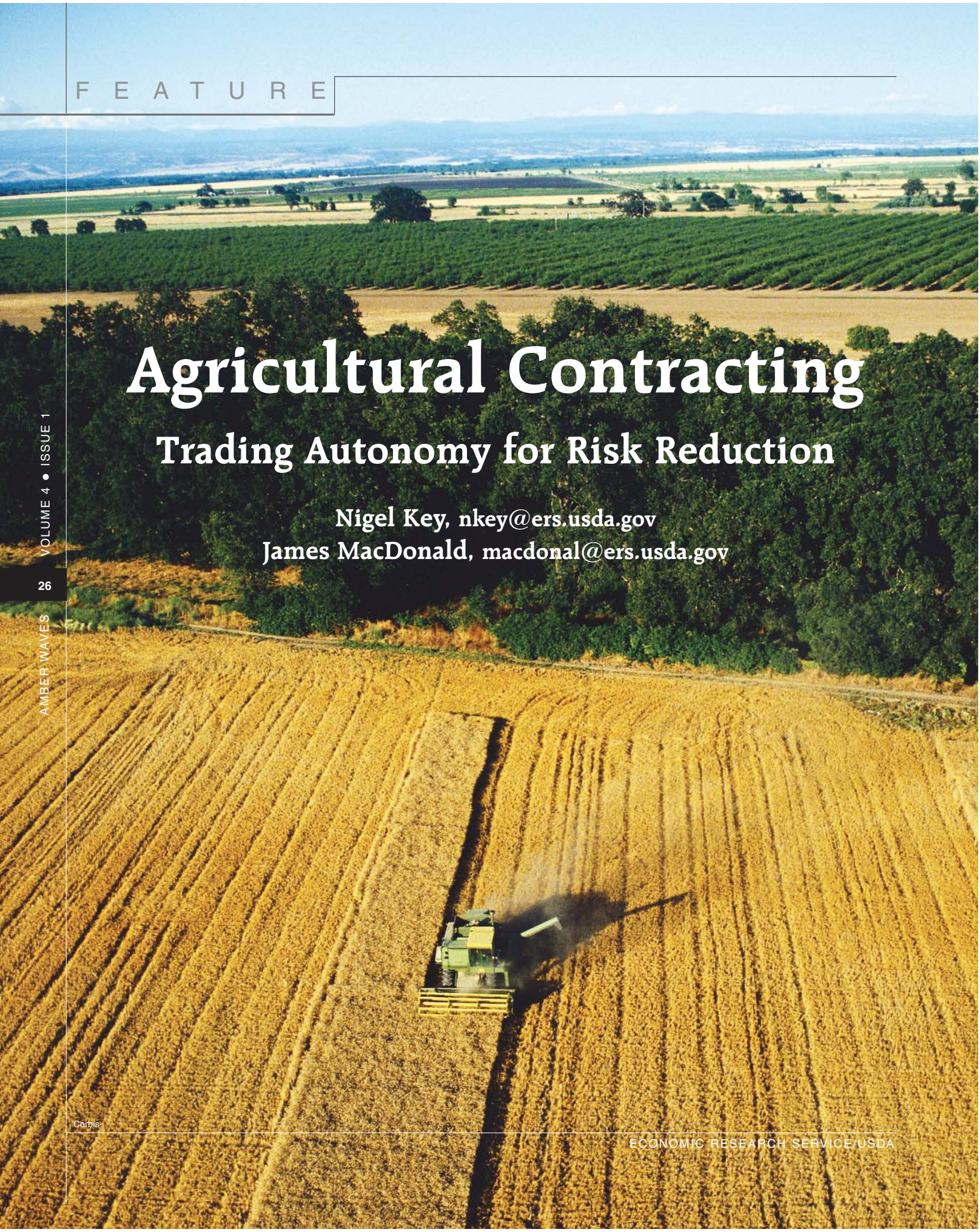

Agricultural Contracting

Trading Autonomy for Risk Reduction

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Farming is a risky business. Sharp changes in farm production or farm prices, driven by the vagaries of weather and disease, sudden shocks to export markets, or the introduction of new technologies, can lead to striking changes in a farmer's income in a short period of time. Agricultural contracts can shift such risks from farmers to contractors, and facilitate farm expansion. For these reasons, more and more farm output is being produced under contract. But farmers who contract often give up something they prize—the autonomy that comes with making management decisions.

Agricultural contracts are agreements between farmers and their commodity buyers that are reached before harvest or the completion of a livestock production stage. They govern the terms under which products are transferred from the farm, and might specify the date of delivery, product price, and required production practices. Contracts create closer linkages between farmers and specific buyers, and may afford the contractor (buyer) greater control over agricultural production decisions.

The growth in contracting has come largely at the expense of *spot (or cash) markets*, where farmers retain full autonomy and receive prices based on prevailing market conditions and product attributes at the time of sale. In the case of hogs, the risk reduction provided by contracts is valuable to risk-averse farmers, who seek to avoid widely fluctuating input and output prices. But hog farmers also appear to value autonomy highly—ERS research shows that a moderately risk-averse producer would need to be paid a price premium of nearly 12 percent to give up the autonomy of independent production.

Recent Trends in Contracting

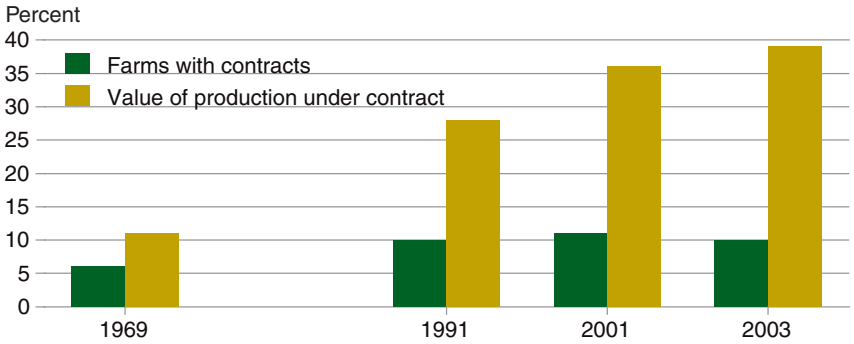
While the share of farms that contract has remained steady, the share of production under contract has grown. In 2003, only 1 in 10 U.S. farms held a contract—a share that has remained stable since at least 1991. However, contracts covered 39 percent of the value of agricultural production in 2003, up from 11 percent in 1969, 28 percent in 1991, and 36 percent in 2001. Large farms are far more likely to use contracts. Only 6 percent of small farms (sales under $250,000) used contracts in 2003, compared with more than 60 percent of very large farms (at least $500,000 in sales). In turn, contracts covered 20 percent of production from small farms and just over half of all production from very large farms.

The trends toward contracts and production on larger farms are parallel: family farms with at least $500,000 in real sales (2003 dollars, adjusted for inflation) accounted for 45 percent of production by 2003, up from 32 percent in 1989 (nonfamily farms held another 14 percent, up from 6 percent in 1989). In the early 1990s, contracts covered a quarter of crop production and a third of livestock production; by 2003, they covered 31 percent of crop production and 47 percent of livestock production (see box, "Production and Marketing Contracts Defined"). Almost all (96 percent) contract crop production is covered by marketing contracts; production contracts are common only for crops grown for seed and for some vegetable and flower production. By contrast, production contracts covered 71 percent of contract livestock production, where absentee contractors can exercise much more effective control over genetics and production decisions.

Contracts offer several advantages to food buyers. First, they can be used to ensure uniformity in commodity attributes, stabilize production volumes, and induce the spread of improved varieties, leading to reduced production and processing costs and lower consumer prices. Second, because contracts are frequently used to coordinate the production of differentiated products (such as high-oil corn, branded lean beef, or organic produce), they can expand the variety of food and agricultural products.

Contracts can have subtle and far-reaching impacts on farmers and the organization of farming. Here, we focus on the effects of contracting on a farmer's income risk, and the associated impacts on farm structure and farmer autonomy.

Incidence and share of production under contract, 1969-2003



Note: Data for 1969 are drawn from the Census of Agriculture. Data for 1991 are drawn from the predecessor to ARMS, the Farm Costs and Returns Survey. Data for 2001 and 2003 are drawn from USDA's annual Agricultural Resource Management Survey (ARMS).

Production and Marketing Contracts Defined

ERS analyses distinguish production contracts from marketing contracts. Under a *production contract*, the farmer provides services to the contractor, who usually owns the commodity under production. For example, contractors in poultry production usually provide chicks to the farmer, along with feed and veterinary/transportation services. The farmer then raises the chicks to maturity, whereupon the contractor transfers them to processing plants. Contractors often provide detailed production guidelines, and farmers retain far less control over production decisions. The farmer's payment resembles a fee paid for the specific services provided, instead of a payment based on the market value of the product.

Marketing contracts focus on the commodity as it is delivered to the contractor, rather than the services provided by the farmer. They specify a price or a mechanism for determining the commodity's price, a delivery outlet, and a quantity to be delivered. The pricing mechanisms sometimes limit a farmer's exposure to price risks, and they often specify price premiums to be paid for commodities with desired levels of specified attributes (such as oil content in corn, or leanness in hogs). The farmer retains control over major management decisions and hence retains more autonomy than is available under production contracts. A *forward marketing contract*, frequently used in grain and livestock production, typically establishes a base price before harvest and provides for delivery of a given quantity of a good within a specified time. A *futures contract* is an agreement to trade a commodity with specified attributes at a specified time. Futures are distinguished from generic forward contracts in that they contain standardized terms, trade on a formal exchange, and are regulated by overseeing agencies.

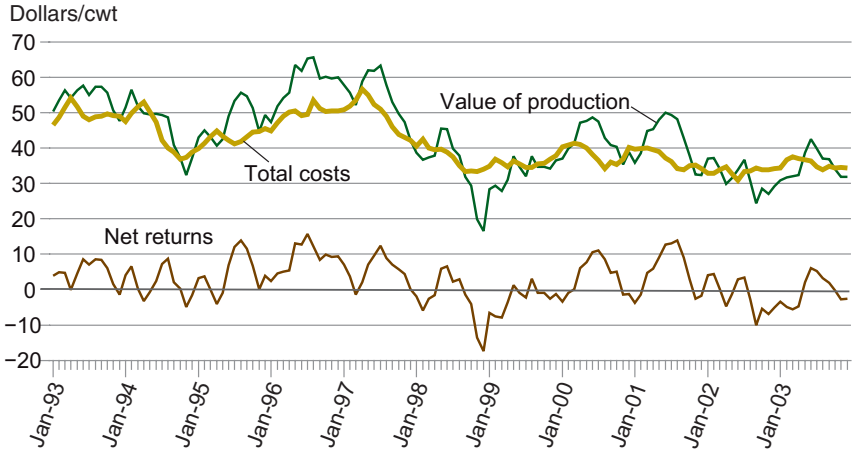
Income Risks in Agricultural Production

Income from farming is risky. *Price risks* arise from unanticipated changes in output or input prices, while *yield (production) risks* result from unpredictable events (like drought, flood, pest infestations, or disease) that affect the quantity of production.

The hog market provides a striking example of price risks, as embodied in average prices for finished hogs (the value of production per hundredweight (cwt)), total costs, and net returns for a typical independent feeder-to-finish producer from 1993 to 2003. Feeder hogs usually weigh about 50 pounds, while finished hogs usually weigh about 250 pounds. Prices for finished hogs ranged from over $65/cwt to less than $17/cwt (in 1998 dollars) from 1993 to 2003, and usually varied by $10-15 during any given year. Costs, largely driven by fluctuations in feed and feeder pig prices, ranged from $30/cwt to $55/cwt, and fluctuated widely during any single year. Consequently, net returns varied widely over 1993-2003: farmers who added 200 pounds per hog earned up to $32 per hog, but also could have lost as much as $35. With most production now on farms marketing more than 5,000 hogs a year, these fluctuations imply substantial income risk.

Risk can reduce farm production and efficiency and lower farm household income. Years with low returns (such as 1998-99) can lead to farm business failure and to financial stress for households without income from other farm enterprises or off-farm work. Banks may be reluctant to advance credit to businesses in extremely risky markets, or during downturns. Greater price risks require farmers to devote more time and effort to marketing decisions that could otherwise be devoted to farm production or family. Farm operator households can limit their exposure to risks by altering production techniques, diversifying the farming operation, combining on-farm and off-farm work, or by using contracts that shift risks to buyers.

Output and input price risk in hog production



Source: Calculations by USDA, Economic Research Service using 1998 Agricultural Resource Management Survey, USDA; Livestock, Meat, & Wool, USDA's Agricultural Marketing Service, various years; and Feed Grains Database, USDA, Economic Research Service, various years.

Arthur C. Smith III, Grant Heilman Photography

Contracts Can Reduce Farmers' Risks

Since contract fees are usually not tied to market prices, production contracts can eliminate most or all of the output price risk facing farmers. Production contracts can also largely eliminate input price risks, because contractors provide the inputs that comprise most of the operating expenses. In 2003, contractors provided inputs representing over 80 percent of operating expenses under broiler production contracts, and over 70 percent of operating expenses under hog production contracts. Contracts could also eliminate production risk; however, most hog and poultry production contracts retain some production risk because they typically adjust base payments to reflect feed efficiency and death losses.

Empirical analyses confirm that hog and poultry production contracts can greatly reduce risk. Some studies compared actual contract and independent production, while others compared contract production with simulated independent producers using the same technology but facing price fluctuations for inputs and outputs. The studies found that price risk caused most of the income risk, that contracts can reduce 90 percent or more of price risk, and that some contracts can substantially reduce yield risk.

Marketing contracts can also greatly reduce a farmer's output price risks. Forward marketing contracts, frequently used in grain and livestock production, establish a base price before harvest and commit the farmer to delivery of a given quantity within a specified time. Forward contracts can set an exact price, or they can set a "basis" price, tying a contract price to a price in the futures market, plus or minus a specified amount (the basis). Farmers can then offset the price fluctuations in the contracted crop by hedging with the purchase of a futures contract, thus eliminating price risks.

Marketing contracts can also mitigate risks from input prices and yields. Product payments can be based in part on input prices. Some crop contracts commit farmers to deliver the production from a particular acreage rather than an outright quantity. Under such *acreage contracts*, the producer still obtains revenue only from the amount delivered, but does not have to make up production shortfalls by buying in the cash market to fulfill contract terms.

Contracts, Risk, and Farm Structure

Contract producers in any given commodity tend to be much larger than independent producers. Recent research suggests that contracts can facilitate farm expansion, partly through risk reduction.

By reducing price risks, production and marketing contracts can make it easier for farmers to obtain credit and thus expand operations. Banks lend more to contract producers than to independent producers, even when producers have the same amount of financial wealth. Because contract producers can call on greater financial resources, they can generate significantly more production than independent producers who have similar levels of wealth. For example, among the least wealthy farmers, contract producers are able to obtain $1.60 in loans for every $1.00 in wealth, while independent producers from the same wealth group borrow $0.40. Production contracts almost eliminate the need for short-term credit to finance operating expenses, thereby allowing the farm to redirect some borrowing to other farm activities. Since very large farms tend to be operated by households that derive most of their income

Larry Lefever, Grant Heilman Photography

from farming, contracts also serve to reduce household income risks from operating at such a large scale. As a result, expanding use of contracts may be one factor driving the shift of production to larger farms.

Since risk reduction benefits farmers, we would expect them to pay something for it; that is, we would expect them to accept contracts offering lower returns than they could expect from independent production. However, our research shows that contract production (lower risk) frequently yields higher returns than independent production (greater risk), even when contract and independent operations produce very similar products. At first glance, this suggests either that farmers do not value risk reduction or that contract operations produce output of superior quality. A more plausible explanation is that contracts force farmers to give up their highly prized autonomy—and farmers must be paid to do that.

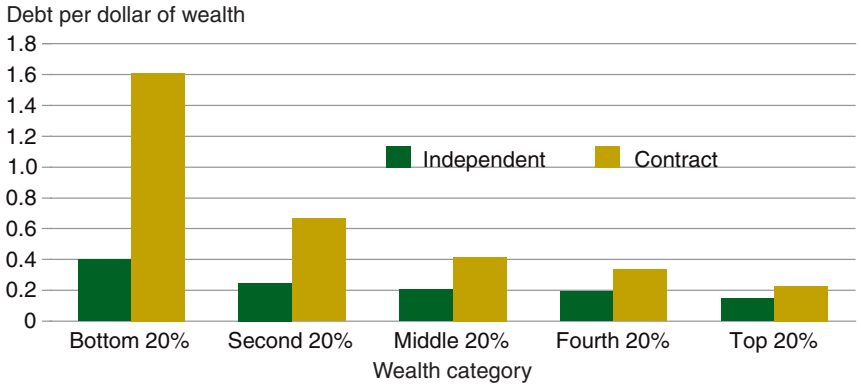
Autonomy Matters to Farmers

Farmers may derive satisfaction from noncontract production because it offers independence, a sense of responsibility, and pride from self-determination in farm management. Farmers who value such independence would need to be compensated by contractors in order to give up the satisfaction from independent production.

ERS recently investigated the tradeoff that hog farmers make between risk reduction offered by contracts and loss of autonomy. The evidence suggests that farmers place great value on both autonomy and risk reduction. A risk-averse farmer is willing to accept a lower average income in exchange for less income variability. Comparing the variation in net returns under independent and contract hog production, we estimate that the risk reduction offered through a typical production contract was worth about $2.61/cwt to a moderately risk-averse farmer, or 4.9 percent of the average price for market hogs during the 1990s.

To estimate the value farmers place on autonomy, we used USDA's Agricultural Resource Management Survey of hog producers to estimate the difference in net returns between contract and independent production. If risk reduction was the only factor influencing farmers, we would expect contractors to offer lower prices to contract producers, and contract producers would realize lower returns from hog production than independents. But instead, our estimates indicate that for moderately risk-averse farmers, the expected return from contract production exceeded the expected return under independent production by $3.68/cwt. Since we might expect hog farmers to willingly give up $2.61/cwt for the risk reduction provided by a contract, and we find that they instead receive a premium of $3.68/cwt to accept a

Hog operation debt-to-wealth ratios, 1996-2000



Source: 1996-2000 Agricultural Resource Management Survey, USDA.

Estimated risk and autonomy premia by degree of risk aversion for hog farmers

	Risk premium		Autonomy premium	
Degree of risk aversion	Dollars/cwt	Percent of average price	Dollars/cwt	Percent of average price
Risk-neutral	0.00	0.0	3.68	6.8
Moderately risk-averse	2.61	4.9	6.29	11.7
Strongly risk-averse	5.22	9.7	8.90	16.6

Notes: The average price for 1988-1997 was $53.75 per hundredweight (cwt) gain in 1998 dollars. The *risk premium* is the value that a farmer would be willing to pay for the risk reduction provided by a contract. The *autonomy premium* is the value that a farmer would have to be paid to give up independence in decisionmaking.

contract, the difference between the two estimates ($6.29 per cwt) reflects the value of autonomy.

Farmers are not unique in valuing autonomy highly; other studies have demonstrated individuals' willingness to pay for the opportunity to be self-employed and make management decisions. For example, a recent study of nonagricultural employment found that individuals were willing to give up about 35 percent of their income in order to be self-employed rather than to be paid employees.

Looking Ahead

Farm production is shifting from smaller to larger family farms and from spot markets to contracts. Technological developments may underlie much of the shift to larger farms, but expanded use of production and marketing contracts supports that shift by reducing financial risks for farm operators. For farm operators, contracts provide benefits from reduced risks, but also impose costs from loss of managerial control and reduced autonomy.

However, the gains to contractors from contract production have been substantial enough to support the additional compensation that must be offered to farmers to surrender some of their autonomy under contracts. With substantial gains to contractors, continued expansion of contracting is likely, with its associated implications for farm size and for farm operator risks and returns. In some commodities, that expansion may build on itself and accelerate: as spot markets in some commodities become quite thin, even producers who would prefer to farm independently and use spot markets may seek contract alternatives. In turn, USDA price reporting systems, traditionally based on spot market transactions, may need reconfiguring to deal with markets in which most transactions occur through contracts.


Tim McCabe, USDA

This article is drawn from . . .

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Food Stamps and Obesity: Ironic Twist or Complex Puzzle?

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USDA and Getty Images

With its roots in the Great Depression and expansion during the 1970s after the Government's declared war on poverty, the Food Stamp Program was designed to provide a nutritional safety net for low-income households while boosting demand for domestic agricultural products. Today it is the Nation's largest food assistance program, providing monthly benefits to about 24 million people at a cost of $27 billion in 2004. The program plays a vital role in stabilizing the incomes of the poor and in promoting food consumption. However, as the major nutrition problems facing the U.S. population have shifted from too little intake to overconsumption and obesity, some have questioned whether food stamps encourage participants to eat too much.

Because food stamps are designed to serve as a first-line defense against hunger, it would be ironic if food stamps were connected to America's obesity problem. Though such a connection appeared to exist in the late 1980s and early 1990s, it does not appear to hold today. National health and nutrition data from 1988-94 show that adults who received food stamps had a greater Body Mass Index (BMI) than adults who were similarly poor but did not participate (eligible nonparticipants), by an amount that is unlikely due to chance, that is, the difference is statistically "significant" (see box, "Weighty Matters"). Weight differences were especially striking for women; 42 percent of women who participated in food stamps were obese, compared with 30 percent of eligible nonparticipating women and 22 percent of women with incomes above the eligibility limit.

According to data from 1999-2002, however, differences among these three groups of women have largely disappeared. For women, increases in BMI and obesity have accelerated more rapidly among those who did not receive food stamps than among those who did. For men, the connection between weight status, receipt of food stamps, and income has also weakened over time.

Furthermore, these data suggest that the relationship between program participation and weight is neither uniform across sex, race, and ethnicity, nor consistent over time. Weight status is a result of eating and physical activity behaviors that interplay with individual and household economic, social, cultural, and genetic factors. Identifying how food stamp participation fits into this complex mix of behaviors and individual and household characteristics requires rich data and careful statistical modeling.

Why Might Food Stamps Cause Weight Gain?

The Food Stamp Program was designed to alleviate hunger by distributing coupons or, currently, Electronic Benefit Transfer cards, that can be used at grocery stores to purchase almost any kind of food. (Benefits cannot be used to purchase alcohol or tobacco, foods eaten in the store or hot foods prepared at the store, nonfood items, or vitamins and medicine.) The program was designed to boost food consumption and energy intake. It is an entitlement program available to all households (subject to certain work and immigration status requirements). Eligibility and benefits are based on household size, household assets, and gross and net income (gross monthly income cannot exceed 130 percent of the Federal poverty guidelines). The average food stamp benefit in 2004 was $86 per person and $200 per household each month.

Evidence suggests that the program has successfully increased food expenditures. Not only does the program increase food expenditures beyond what households would spend without the program, households spend more on food than they would if the same amount of benefit was given as cash. Estimates show that a dollar in food stamps increases expenditures on food by $0.17 to $0.47 while a dollar of cash increases expenditures on food by about $0.11. (A dollar of food stamps does not lead to a dollar in additional spending on food because the food stamp benefit allows cash previously spent on food to be spent on nonfood goods such as rent or child care.) This boost in food expenditures has been blamed for increasing food consumption such that program participants are more prone to obesity.

Increased resources for food spending could be used to purchase more expensive foods that were previously out of reach. If participants purchase higher priced but more healthful foods, food stamps could have a positive effect on weight. But if participants purchase higher priced, less healthful foods or simply greater quantities of the same foods, then food stamps could lead to weight gain. Studies on food stamps' effect on eating behaviors and nutrient intake are not conclusive. Food stamps do increase the availability of food energy, protein, and some micronutrients (vitamin A and iron, for example). Further, those who receive food stamps consumed more meat, added sugars, and total fats, but did not consume more fruits, vegetables, grains, and dairy products.

Does the monthly food stamp cycle, in which benefits are issued once a month, contribute to sporadic consumption of food? In the first few weeks after benefits are issued, food may be abundant for a household, and much less so near the end of the month. A household's eating patterns may mirror the cyclic availability of food. Food deprivation has been linked with binge eating when food later becomes plentiful. Further, binge eating has been linked to weight gain over time. If many food stamp recipients tend toward this behavior, the monthly cycle of food stamps may contribute to weight gain independent of the amount and form of the benefit.

Weight Gain Was Not Consistent Across Subgroups

If food stamps by themselves cause systematic weight gain, then we expect food stamp participants to be heavier than eligible nonparticipants. Simple prevalence estimates of weight status using 1988-94 data from the National Health and Nutrition Examination Survey (NHANES) indicate that not all age, gender, and racial/ethnic groups showed a positive association between food stamps and weight.

Differences between food stamp participants and eligible nonparticipants were greatest among women, but these differences were concentrated among non-Hispanic White women. (Women account for about two-thirds of adult food stamp recipients.) Among this subgroup, those who received food stamps in 1988-94 had greater BMI and were more likely to be obese than eligible nonparticipants. The same was true for Mexican-American women. These associations were not, however, present for non-Hispanic Black women. (The 1988-94 NHANES oversampled Mexican Americans, but not other Hispanic Americans. The sample size does not support separate estimates representative of all Hispanic Americans, only Mexican Americans.)

Men who receive food stamps tended to be lighter than their eligible nonparticipant and higher income counterparts. For both non-Hispanic Black and White men in 1988-94, those who participated in food stamps were less likely to be overweight than eligible nonparticipants and higher income men of the same ethnicity. On the other hand, Mexican-American men who received food stamps were more likely to be obese and had higher average BMI than eligible nonparticipating Mexican-Amer-ican men.

The relationships between food stamp receipt and weight status for children were not as strong as they were for adults. Estimates from 1988-94 for children age 5-19 and for each sex and racial/ethnic group showed no differences between food stamp participants and eligible nonparticipants in terms of average BMI and the probabilities of being at-risk of overweight or overweight. The one exception, which contradicts the notion that food stamps cause children to be overweight, is for non-Hispanic Black boys, who were *less* likely to be overweight than eligible nonparticipating Black boys.

Thus, simple prevalence estimates showed that not all gender, age, and racial/ethnic subgroups demonstrated a positive association between food stamps and weight. In fact, differences in weight status between adult food stamp recipi-


Creatas

Weighty Matters

Body Mass Index (BMI) is calculated as an individual's weight in kilograms divided by the square of his or her height in meters. For adults, numerical thresholds of BMI distinguish healthy weight from underweight, overweight, and obesity. For children and adolescents, sex-specific BMI-for-age thresholds using the 2000 Centers for Disease Control and Prevention growth charts distinguish healthy weight from underweight, at-risk of overweight, and overweight.

Adults

Underweight = BMI below 18.5
Healthy weight = BMI at or above 18.5 but below 25
Overweight = BMI at or above 25 but below 30
Obese = BMI at or above 30

Children (age 2 to 19)

Underweight = Below the 5th percentile of BMI-for-age
Healthy weight = At or above the 5th percentile but below the 85th percentile of BMI-for-age
At-risk of overweight = At or above the 85th percentile but below the 95th percentile of BMI-for-age
Overweight = At or above the 95th percentile of BMI-for-age

ents and nonparticipants were primarily driven by differences among non-Hispanic White women alone.

Today, Relationship Between Food Stamps and Weight Weakening

Perhaps participation in the Food Stamp Program does have deleterious effects for some but not all, demographic groups. If this effect were present for a subgroup, such as non-Hispanic White women, then we would expect the association between weight status and program participation to be steady over time, especially since program rules have not changed much since the 1970s. Instead, the association between weight and food stamp participation varies over time.

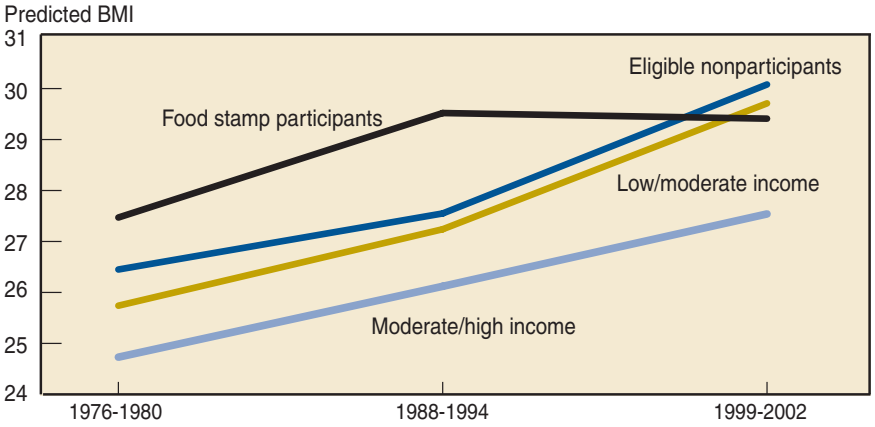
Overweight and obesity have been increasing in the overall U.S. population. According to the Centers for Disease Control and Prevention, 47 percent of the U.S. adult population were overweight or obese in 1976-80. By 1999-2002, over 65 percent were overweight or obese. Further, rates of obesity doubled over this period, from 15 percent to 31 percent. Are these increases worse for food stamp participants or do their trends simply mimic those of the U.S. population at large?

Among women, food stamp participants are not getting relatively heavier over time. Rather, BMI has grown more among eligible nonparticipants—and even among women with higher incomes—than for food stamp recipients. This is especially true for non-Hispanic White women. In 1976-80 and 1988-94, White women who participated in food stamps had greater BMI and were more likely to be overweight and obese than eligible nonparticipants and those with higher incomes. By 1999-2002, these differences had largely disappeared; the only exception was that White women in the moderate/high income group were still less likely to be obese than food stamp recipients. The closing of the BMI gap is due to changes in weight status by nonparticipating women—the average BMI of food stamp recipients remained steady. For non-Hispanic Black women and Mexican-American women, the trends are not as striking, but the general picture is the same.

Over all three racial and ethnic groups, the probability of a woman's being overweight grew the least for food stamp recipients over the study years. For non-Hispanic Black and White women, the likelihood of overweight grew the most for those with low/moderate income. For Mexican-American women, the probability of overweight grew the most for eligible nonparticipants and moderate/high-income women.

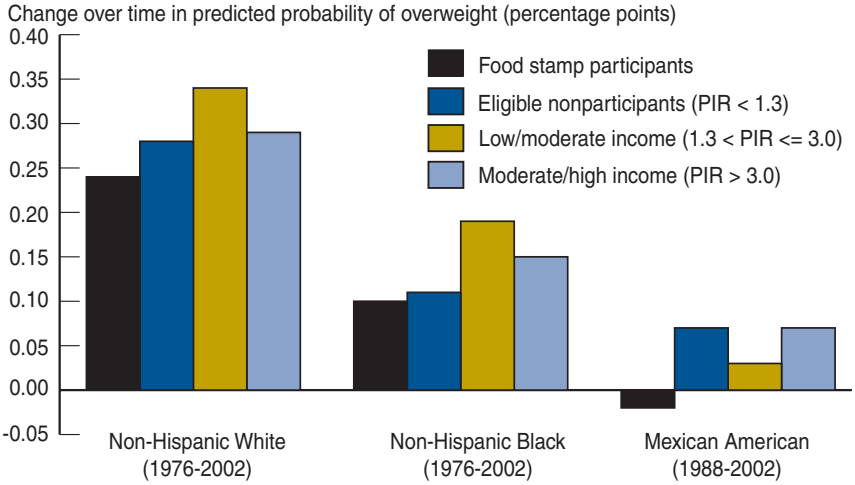
Trends for men are almost the exact opposite of those for women. Data from

For Non-Hispanic White women, the BMI of food stamp recipients has remained steady while increasing for other groups



Note: Predicted BMI calculated using regression coefficients assuming age 40.

Among women, the likelihood of becoming overweight grew the least for food stamp recipients



Notes: Probabilities calculated using logit coefficient estimates assuming age 40. PIR is the ratio of income to the Federal poverty threshold.

Source: Economic Research Service/USDA, using data from National Health and Nutrition Examination Surveys.


USDA

What Data Do We Need?

Behaviors associated with food consumption and weight gain are complex, and it is difficult to identify direct links between food stamps and excess weight. The Food Stamp Program is an entitlement program, where the law requires that benefits be provided to everyone who is eligible and takes the necessary steps to qualify. Thus, randomized experiments, where "alike" individuals are randomly assigned to the experiment group (and receive food stamps) and compared with individuals assigned to a control group (who are denied food stamps), are not legally feasible. As a result, researchers must rely on existing survey data and statistical methods to understand the effects of food stamps on weight.

A basic problem in deciphering causal links between program participation and outcomes like weight is that eligible households choose whether or not they participate. Overall, in fiscal year 2004, 56 percent of eligible persons participated in the Food Stamp Program. Participation rates vary by characteristics such as household structure and gender. Those who choose to participate may be different from those who choose not to participate, and this difference could also be related to weight status. While demographic and other characteristics can be used to help control for differences between those who choose to participate and those who do not, researchers often cannot observe all these differences. For example, strong preferences for food relative to other goods is difficult to observe, yet those people with such tastes may be more likely to participate in the program and more likely to be overweight. If such positive "self-selection" is not accounted for, estimates of the effect of food stamps on weight will be overestimated because these individuals may have gained weight without the Food Stamp Program. Researchers have used a variety of sophisticated statistical procedures to counteract selection bias, however, none of the techniques can guarantee that selection bias has been eliminated.

We used multiple periods of data on similar subgroups to see whether food stamp-weight associations were consistent over time. Implicit in examining such trend data is that the composition of subgroups did not change (especially with respect to their propensities to become overweight or obese). In reality, it is likely that changes in economic conditions affected who is eligible and who chose to receive food stamps. Changes in other assistance programs for low- income families, such as the 1996 changes to the cash welfare program, also likely affected who chose to participate. The number of food stamp participants rose 47.4 percent from 1988 to 1994, but then began to fall—so much so that by 2000, the number of participants was below the 1988 level. This span of time included major changes in both economic conditions and welfare policy. Because the subgroups we compare do not consist of the same people over time, we do not try to draw causal conclusions about the effect of food stamps on weight.

Collecting information on weight, program participation, and other characteristics for the same set of people over time could help identify causal links. Ideally this information would be collected before, during, and after periods of food stamp participation. It will also be important to collect data over a number of years for each person to see if long-term receipt of food stamps has different impacts than short-term receipt, and to observe long-term changes in weight. Data that include multiple measures of the specific amount and types of food eaten and levels of physical activity for the same set of people over time could also be used to illuminate differences between income and program participation groups.

previous years showed that food stamp recipients were less likely to be overweight than eligible nonparticipants and higher income men. However, the most recent data show that differences in overweight status have almost entirely disappeared.

Patterns in children's weight status vary over time and by gender, race, and ethnicity. For girls age 5-19, there is little association between weight status and program participation status. Most differences that existed in previous years are not present in more recent years. Similarly, for non-Hispanic Black and White boys, few differences in weight status among food stamp participation and income groups were found in the most recent data.

For Mexican-American boys, the story is different. Data for 1999-2002 show Mexican-American boys who participated in the Food Stamp Program have higher average BMI than Mexican-American boys who are eligible nonparticipants or in the highest income group. Mexican-American boys who receive food stamps are also more likely to be overweight than their nonparticipating counterparts, regardless of income and eligibility status.

Connection Uncertain

Overall, estimates from the latest national data show a weakening relationship between food stamp receipt and weight status. This reversal is most noticeable among women, the group for which differences between participants and nonparticipants received the most attention and for whom previous research has found the most consistent associations between food stamps and weight. For women, multi-year data show the opposite of what we would expect to find if food stamps were behind increased obesity. For men, it appears that food stamp participants are catching up weightwise with nonparticipants.

Does this new evidence exonerate food stamps in the obesity puzzle? Is there a potential problem for men who receive food stamps? The reality is that we do not know enough to conclude whether food stamps are making low-income Americans fatter. Past and current behaviors and characteristics affect an individual's weight at a given point in time. Further, eligible individuals choose whether or not to receive food stamps and those who choose to participate may be different from those who do not.

Disentangling how food stamp participation intersects with these behaviors and characteristics and with weight is difficult. Thus far, data and statistical method limitations have prevented us from doing so conclusively (see box, "What Data Do We Need?"). Our results show that food stamps do not systematically lead to weight gain. Rather, links between food stamp participation and weight status are consistent neither across population subgroups nor over time. These findings highlight the dangers of drawing causal conclusions about food stamps and weight using data from a single point in time.

This article is drawn from . . .

Nutrition and Health Characteristics of Low-Income Populations, Volume 1, Food Stamp Participants and Nonparticipants, by M.K. Fox and N. Cole, E-FAN-04014-1, USDA, Economic Research Service, December 2004, available at: www.ers.usda.gov/publications/efan04014-1/

The Effect on Dietary Quality of Participation in the Food Stamp and WIC Programs, by P.E. Wilde, P.E. McNamara, and C.K. Ranney, FANRR-9, USDA, Economic Research Service, September 2000, available at: www.ers.usda.gov/publications/fanrr9/

"Food Stamp Program Participation is Positively Related to Obesity in Low Income Women," by D. Gibson, *Journal of Nutrition*, Vol. 133, pp. 2225-2231, 2003.

"Dietary Effects of the Food Stamp Program," by B. Devaney and R. Moffitt, *American Journal of Agricultural Economics*, Vol. 73, pp.202-211, February 1991.

The ERS Briefing Room on the Food Stamp Program at: www.ers.usda.gov/briefing/foodstamps/

The ERS Briefing Room on Diet and Health at: www.ers.usda.gov/briefing/dietandhealth/

Data may have been updated since publication. For the most current information, see www.ers.usda.gov/publications/agoutlook/aotables/.

Farm, Rural, and Natural Resource Indicators

	2000	2001	2002	2003	2004	2005	Annual percent change 2002-03	2003-04	2004-05
Cash receipts ($ billion)	192.1	200.1	195.0	216.6	241.2	239.6f	11.1	11.4	-0.7
Crops	92.5	93.3	101.0	111.0	117.8	115.9f	9.9	6.1	-1.6
Livestock	99.6	106.7	94.0	105.6	123.5	123.7f	12.3	17.0	0.2
Direct government payments ($ billion)	22.9	20.7	11.2	17.2	13.3	22.7f	53.6	-22.7	70.7
Gross cash income ($ billion)	228.7	235.6	221.0	249.5	271.7	280.6f	12.9	8.9	3.3
Net cash income ($ billion)	56.7	60.1	49.5	71.6	85.5	83.2f	44.6	19.4	-2.7
Net value added ($ billion)	91.9	95.0	78.6	101.2	125.9	118.1f	28.8	24.4	-6.2
Farm equity ($ billion)	1,025.6	1,070.2	1,110.7	1,180.8	1,293.9f	1,378.9f	6.3	9.6	6.6
Farm debt-asset ratio	14.8	14.8	14.8	14.4	13.8f	13.4f	-2.7	-4.2	-2.9
Farm household income ($/farm household)	61,947	64,117	65,757	68,515	81,480p	83,660f	4.2	18.9	2.7
Farm household income relative to average U.S. household income (%)	108.6	110.2	113.7	116.0	134.6p	na	2.0	16.0	na
Nonmetro-metro difference in poverty rate (% points)	2.6	3.1	2.6	2.1	na	na	-19.2	na	na
Cropland harvested (million acres)	314	311	307	315	312p	na	2.6	-1.0	na
USDA conservation program expenditures ($ bil.)[1]	3.3	3.7	4.2	4.3	5.1	na	2.4	18.6	na

Food and Fiber Sector Indicators

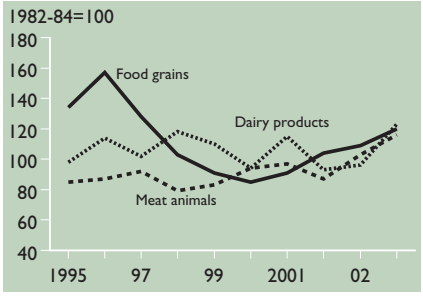
U.S. gross domestic product ($ billion)[2]	9,817	10,128	10,470	10,971	11,734	na	4.8	7.0	na
Food and fiber share (%)	4.8	4.8	4.8	4.8	na	na	0.0	na	na
Farm sector share (%)	0.7	0.7	0.7	0.8	na	na	14.3	na	na
Total agricultural imports ($ billion)[1]	38.9	39.0	41.0	45.7	52.7	57.5	11.5	15.3	9.1
Total agricultural exports ($ billion)[1]	50.7	52.7	53.3	56.2	62.4	62.0	5.4	11.0	-0.6
Export share of the volume of U.S. agricultural production (%)	17.6	17.6	16.7	17.9	16.3	na	7.2	-8.9	na
CPI for food (1982-84=100)	167.9	173.1	176.2	180.0	186.2	190.7f	2.2	3.4	2.4
Share of U.S. disposable income spent on food (%)	9.8	9.8	9.5	9.4	9.5	na	-1.1	1.1	na
Share of total food expenditures for at-home consumption (%)	51.7	51.7	50.8	50.3	49.7	na	-1.0	-1.2	na
Farm-to-retail price spread (1982-84=100)	210.3	215.4	221.2	225.6	232.9	na	2.0	3.2	na
Total USDA food and nutrition assistance spending ($ billion)[1]	32.6	34.2	38.0	41.8	46.2	na	10.0	10.5	na

f = Forecast. p = Preliminary. na = Not available.

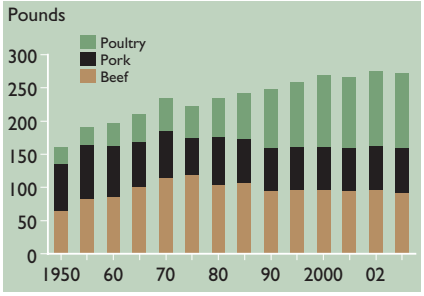
[1] Based on October-September fiscal years ending with year indicated.

[2] GDP data released July 29, 2005, and agricultural output data released April 20, 2005, by U.S. Department of Commerce, Bureau of Economic Analysis.

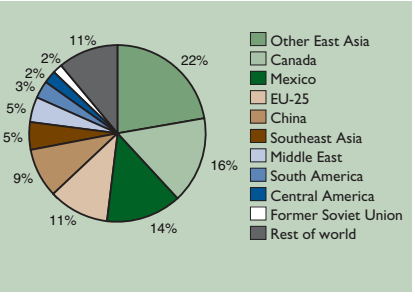
Producer price indices of selected product groups



U.S. per capita meat consumption, 1950-2003



Major destination of U.S. agricultural exports, 2004



For more information, see www.ers.usda.gov/amberwaves/

Behind the Data

Marketing Costs and Margins in International Trade

Marketing costs and margins—the difference between prices paid by importers and those paid by consumers—can be at least as effective a barrier to trade as tariff and nontariff measures. Marketing costs include packing, handling, transport, storage, losses, fees and taxes, and other charges involved in moving agricultural products from port to retail market. Marketing margins reflect the portion of the difference between importer and consumer prices not accounted for by marketing costs. These include returns (or profits) to international traders, wholesalers, retailers, and other intermediaries in the supply chain, as well as unaccounted costs. Investments in supply chain infrastructure and competition among firms tend to reduce marketing costs and margins.

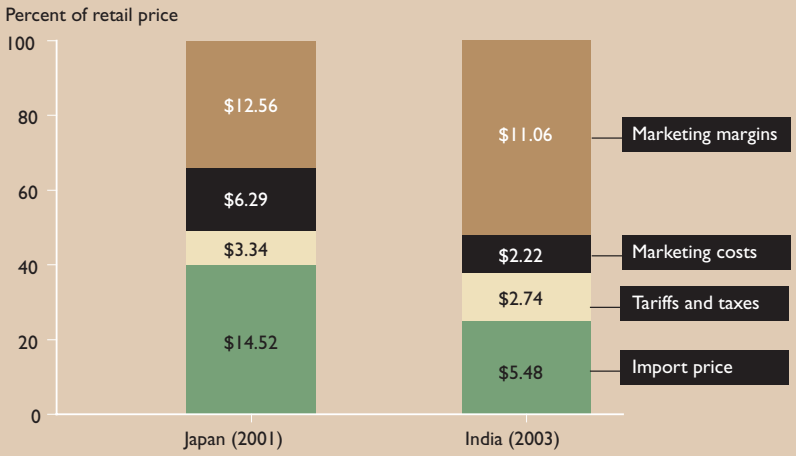
ERS estimated the marketing costs and margins for two countries that protect their apple markets from foreign competition through high tariffs and nontariff barriers: Japan and India. Estimates for Japan were based on data from the USDA's Foreign Agricultural Service (FAS) office in Tokyo and reflect conditions in 2001—Japan did not import U.S. apples between 2002 and 2004. FAS sources included Japan's customs trade statistics and information from Japanese traders. Data on India's apple market were obtained from published sources of market price data and interviews with growers, contractors, wholesalers, and retailers of U.S. apples sold in the Delhi market during 2003.

For Japan, the import price of a U.S. apple accounts for the largest share of the consumer price of imported apples—about 40 percent. Marketing margins received by importers, wholesalers, and retailers equal 33 percent of the retail price. Costs of customs storage and clearing, transportation to the wholesaler and retailer, and repacking into smaller units before delivery to supermarkets total about 17 percent of the consumer price. Japan imposes a 17-percent ad valorem import tariff and a 5-percent consumer tax (at the border and on top of the tariff), which together total approximately 9 percent of the retail price for apple imports.

In India, margins account for the largest share of the consumer price for imported apples—about 51 percent. The import price accounts for the next largest share of the consumer price, about 25 percent, and India's high, 50-percent tariff on imported apples accounts for about 13 percent. Estimated marketing costs account for the remaining 10 percent. Marketing costs are low because there is no grading, processing, packaging, or other forms of value addition in the Indian marketing chain, and because traders report negligible losses in marketing imported apples. In emerging markets such as India, the lack of investment in infrastructure and the lack of competition may result in relatively high costs and margins.

Marketing margins—profits and unaccounted costs in the marketing system—account for a large share of the consumer price of imported apples in both Japan and India. Measures to reduce margins, possibly through increased competition or more integration of the various stages in the supply and marketing system, could lead to lower retail prices and higher demand for imported apples. In these cases, the impact of tariffs on trade appears less significant than that of marketing margins and costs, but high tariffs—by raising the price—have a cascading effect on costs and margins, and may also inhibit competition that would reduce margins.

Marketing costs and margins for imported apples



Dollar costs are per 10-kilogram box.

Source: USDA, Economic Research Service.

Barry Krissoff, barryk@ers.usda.gov
Maurice Landes, mlandes@ers.usda.gov

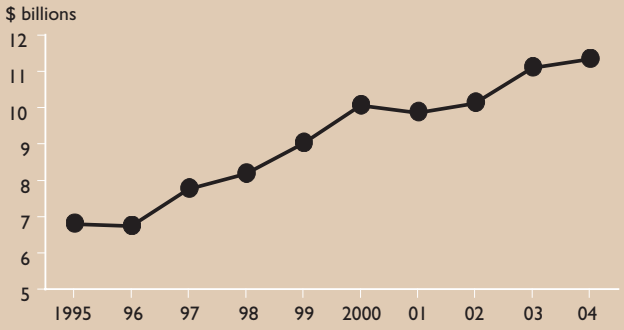
For more information...

Resolution of the U.S.-Japan Apple Dispute: New Opportunities for Trade, by Linda Calvin and Barry Krissoff, FTS-31801, USDA, Economic Research Service, October 2005, available at: www.ers.usda.gov/publications/fts/oct05/fts31801/

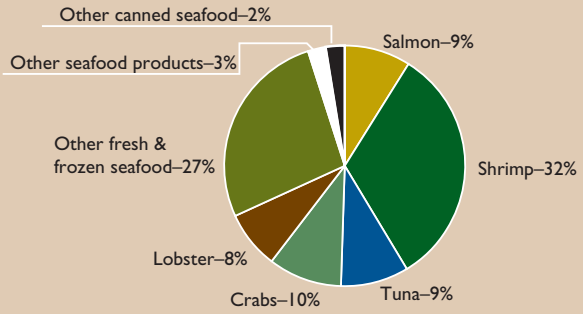
Prospects for India's Emerging Apple Market, by Satish Y. Deodhar, Maurice Landes, and Barry Krissoff, FTS-319-01, USDA, Economic Research Service, January 2006, available at: www.ers.usda.gov/publications/fts/jan06/fts31901/

Markets and Trade

Between 1995 and 2004, the value of U.S. edible seafood imports has risen 60 percent



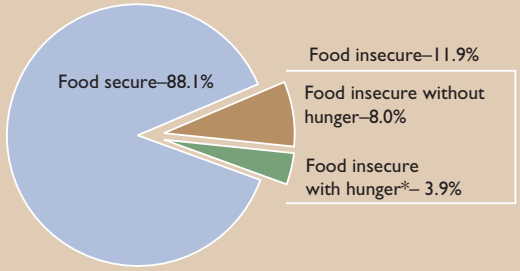
U.S. edible seafood imports were dominated by high-value fish and shellfish in 2004



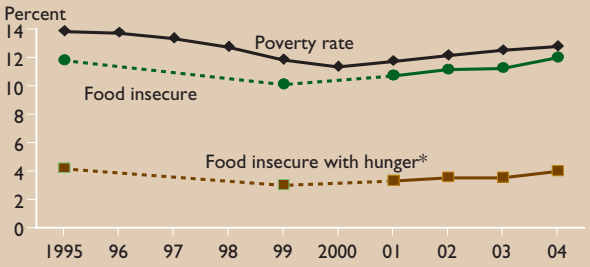
Source: USDA, Economic Research Service.

Diet and Health

Most U.S. households were food secure throughout the entire year in 2004



The percentage of households that had difficulty putting enough food on the table has tracked the poverty rate



* Households in which one or more persons were hungry at times during the year because of a lack of money or other resources.

Note: Food security statistics for 1996-98 and 2000 are not directly comparable with those presented.

Source: Prepared by USDA, Economic Research Service using data from Current Population Survey Food Security Supplements.

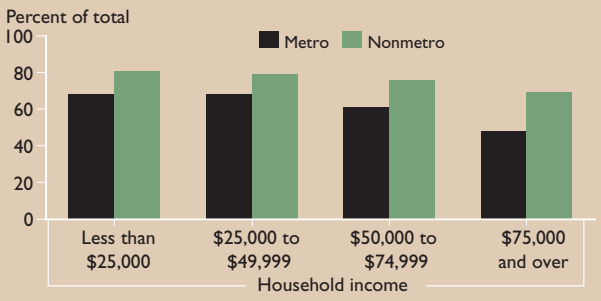
Farms, Firms, and Households

Larger farms contract more, 2003

Source: Prepared by USDA, Economic Research Service using data from USDA's 2003 Agricultural Resource Management Survey.

Rural America

Percent of Internet households with dial-up service by income and residence, 2003



Source: Calculations by USDA, Economic Research Service using data from U.S. Census Bureau's Current Population Survey.

On the Map

Nonmetro net migration rates. More people moved from metro to nonmetro areas than in the opposite direction during 2000-04. This movement, along with immigration from abroad, increased the nonmetro population by 417,000 (0.9 percent) over the period. Nonmetro net migration rates ranged from 37 percent in Flagler County, FL, to -25 percent in Loving County, TX. The highest net migration rates were close to those of urbanized areas (the built-up cores of metro areas). Most counties in the Great Plains continued to experience net outmigration.

John Cromartie
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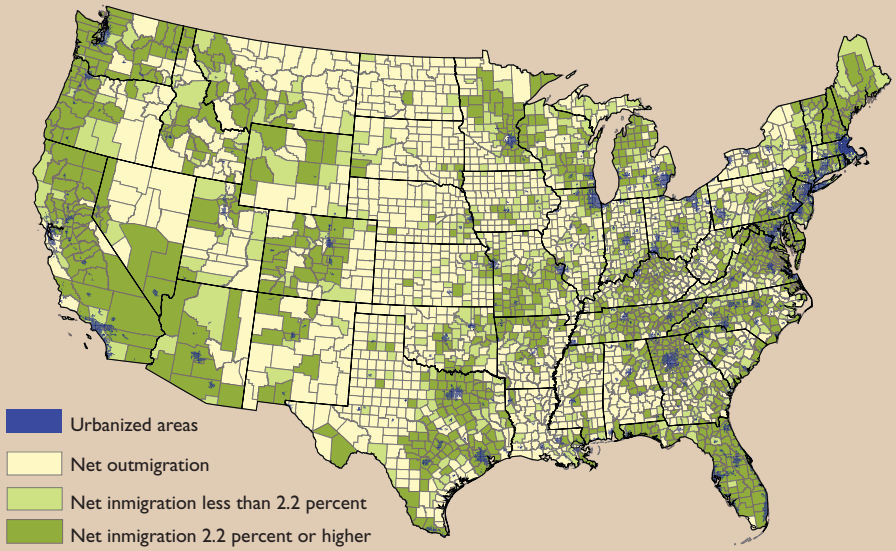
County net migration rates in relation to urbanized areas, 2000-04



Note: Urbanized areas are defined by the U.S. Census Bureau. They are densely settled urban agglomerations that form the core of all metro areas.

Source: Prepared by USDA, Economic Research Service using data from the U.S. Census Bureau.

In the Long Run

Changing nonmetro definitions affect population counts. Nonmetro population grew in absolute terms every year since 1970, but nonmetro areas lost population each decade through reclassification of counties from nonmetro to metro status. The nonmetro population decreased from 54.3 million in 1970 (based on the nonmetro definition current at that time) to 49.7 million in 2004 (based on the most recent definition).

Between 1973 and 2004, 442 nonmetro counties became metro. Some nonmetro counties changed because rules governing metro classification changed. However, most became metro because of rapid urbanization—existing metro areas sprawled into neighboring nonmetro counties and smaller cities achieved metro status. Far from losing population, nonmetro areas as defined in the 1970s grew by 50 percent from 1970 to 2004, up to 77.8 million people.

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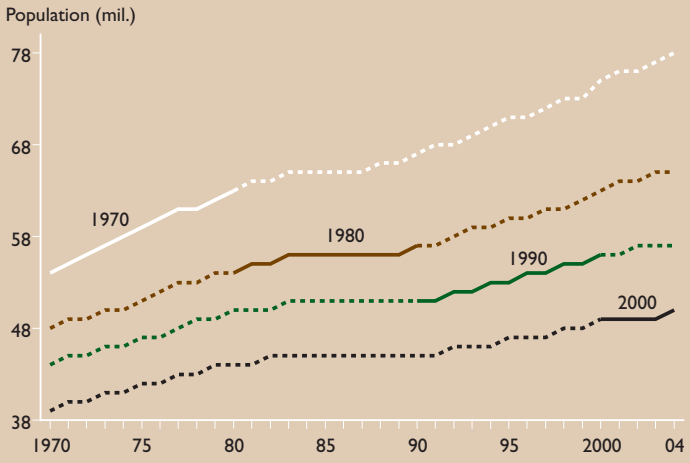
Nonmetro population by changing nonmetro definitions, 1970-2004



Source: Prepared by USDA, Economic Research Service using data from the U.S. Census Bureau.

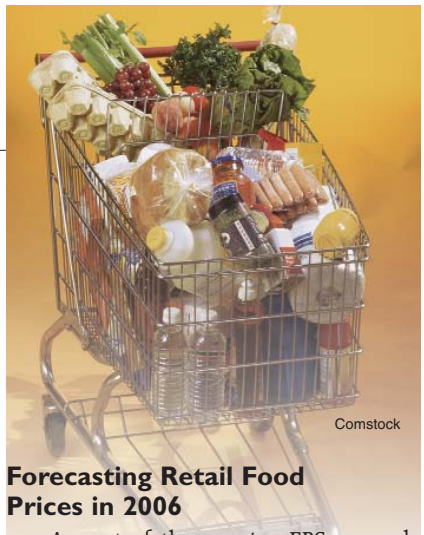
Current Activities

ERS Supports Pacific Economic Cooperation Council

Over a number of years, ERS has had an ongoing role in providing information and analytical support for the Pacific Economic Cooperation Council (PECC). When applicable to its mission, ERS strives to assist PECC in its program of work, which aims to enhance cooperation and policy coordination in areas including trade, investment, and all major industrial sectors in the Asia-Pacific region. Past ERS contributions have focused on food retailing, transportation infrastructure, urban population growth, and water scarcity. More recently, ERS economist Jean Buzby gave a presentation on private and public cooperation in raising food safety standards at the Asia-Pacific Economic Cooperation Food Safety Cooperation Seminar in Gyeongju, South Korea. The contribution of the private sector in improving food safety will become increasingly important given the trends towards stricter supply chain management, growth in international trade, and industry consolidation. Public and private sector cooperation in food safety can go a long way in strengthening food safety, encouraging harmonization with international food standards, and facilitating and promoting international food trade. **Jean Buzby, jbuzby@ers.usda.gov**

New Trade Model

Researchers from ERS and Pennsylvania State University have collaborated to develop a new trade model. The ERS-Pennsylvania State University Trade model is an applied partial-equilibrium, multiple-commodity, multiregion model of agricultural policy and trade. It is a gross trade model that accounts for exports and imports of each commodity in every identified region. Currently, there are 12 countries/regions and 35 commodities included in the framework. The model, called the Partial Equilibrium Agricultural Trade Simulator (PEATsim), is available for public use and comment at trade.aers.psu.edu. **Richard Stillman, stillman@ers.usda.gov**



Comstock

Forecasting Retail Food Prices in 2006

As part of the ongoing ERS research focus on retail food prices and the impact of energy, transportation, and other operating costs on retail price changes, ERS economists Ephraim Leibtag and David Torgerson participated in the Food Institute's first annual "What's Ahead for 2006" conference. The focus of the conference was to estimate the impact of recent cost increases on the food market system and to interact with food industry decisionmakers to develop solutions to deal with increasing production costs. ERS researchers discussed recent trends in retail food markets, projections of retail food price inflation for 2006, and the recent increase in energy prices and the impact of those changes on food manufacturers. **Ephraim Leibtag, eleibtag@ers.usda.gov**

Recent Meetings

American Time Use Survey Early Results Conference

In December 2005, ERS, the University of Maryland, and the U.S. Department of Health and Human Services cosponsored the "American Time Use Survey Early Results Conference" in Bethesda, Maryland. The Bureau of Labor Statistics American Time Use Survey (ATUS) collects information on how Americans use their time, and survey data show the range of detailed activities performed daily, including weekdays versus weekends, the amount of time spent on each activity, and the daily schedule of activities. Using ATUS data, researchers presented 15 papers and 27 posters on a variety of topics, including time spent on child care, elder care, travel, food preparation and consumption, sleeping, and exercising. ERS presented details about its Food & Eating Module questions, which were added to the ATUS in October 2005. These questions were designed to examine relationships between time use; food purchases, preparation, and consumption; and obesity. Conference papers are available at: www.atususers.umd.edu/papers/. **Karen Hamrick, khamrick@ers.usda.gov**

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Roundtable on Food Safety Insurance and Risks

In December 2005, ERS and the Risk Management and Decision Processes Center, Wharton School, University of Pennsylvania conducted a roundtable on the role of private insurance and third-party certification in monitoring food safety performance and managing food safety risks. The ERS/Wharton roundtable brought together representatives from the insurance industry, third-party certifiers, food manufacturers and distributors, government regulators, as well as legal experts and economists to examine the evolution of third-party food safety certification in the U.S. **Fred Kuchler, fkuchler@ers.usda.gov**

European Union Food Regulations and Standards

In November 2005, ERS and Farm Foundation cosponsored a workshop, "European Union Food Regulations and the Emergence of Private Standards: Implications for International Trade." The new EU food regulations are increasingly complex, geared toward process verification and traceability, while private standards play an increasing role. These developments have significant cross-border implications, affecting both U.S. and global food trade. Speakers from Europe and the U.S., representing the food industry, regulatory experts, and academics, along with over 100 participants, gathered to explore the key challenges and opportunities for the U.S. food industry posed by the new EU food regulatory environment. Speakers' presentations are available at: www.farmfoundation.org/projects/06-19EUFoodRegs.htm. **Aziz Elbehri, aelbehri@ers.usda.gov**

New Releases

Research Program on Invasive Species

ERS recently released a report, *Program of Research on the Economics of Invasive Species Management: Fiscal 2003-2005 Activities* (available at: www.ers.usda.gov/briefing/invasivespecies/). The report provides an overview of ERS's initiative to improve the economic understanding of policy and decisionmaking related to invasive species problems, policies, and programs. The report summarizes the 26 extramural research projects funded through PREISM's competitive awards process, as well as ERS research on soybean rust and other invasive species issues over the past 3 years. The report also describes ERS's active outreach strategy for dissemination of PREISM research findings to key stakeholders. **Craig Osteen, costeen@ers.usda.gov,** and **Donna Roberts, droberts@ers.usda.gov**

The citations here and in the rest of this edition are just a sample of the latest releases from ERS. For a complete list of all new ERS releases, view the calendar on the ERS website: www.ers.usda.gov/calendar/


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New ERS Briefing Room on Farm Household Well-being

To understand farm household well-being, one must shift from the traditional focus on farm sector income to the total income received by the household. Today, farm business income is shared with contractors, landlords, and other investors, and farming is only one of several economic activities—including off-farm employment, nonfarm businesses, and other investment activities—in which farm households participate. For a more complete understanding of farm household well-being, it is important to consider farm household wealth, as well as total household income. A new briefing room on the ERS website, "Farm Household Economics and Well-being" (www.ers.usda.gov/briefing/wellbeing/), synthesizes the latest information from various data sources on farm household labor and demographic characteristics; farm household income; farm household assets, debt, and net worth; and composite measures of farm household well-being. **Ashok Mishra, amishra@ers.usda.gov**

Commodity Markets and Trade

ERS Outlook reports provide timely analysis of major commodity markets and trade, including special reports on hot topics. All reports are available electronically and can be found at www.ers.usda.gov/publications/outlook/, along with a calendar of future releases. **Joy Harwood, jharwood@ers.usda.gov**

Hispanics in Rural America

Rural Hispanics At A Glance (EIB-8), the latest in a series of ERS reports on conditions and trends in rural areas, is based primarily on data from the 2000 Census and provides recent demographic and socioeconomic indicators for Hispanics living in nonmetropolitan (nonmetro) areas. After nearly doubling in population from 1.4 million in 1980 to 2.7 million in 2000, Hispanics in rural and small-town America now represent the most rapidly growing segment of the population in nonmetro counties. This growth has helped to stem decades of small-town population decline and to revitalize many rural communities. This six-page brochure incorporates short analyses with colorful charts and maps on key indicators of the rural Hispanic population to inform and assist public officials, community organizations, rural development specialists, and others in their efforts to enhance the economic opportunities and quality of life for this rapidly growing population. **William Kandel, wkandel@ers.usda.gov**

ERS Summer Interns

Photo: Stephen Peterson, USDA/ERS

Some of the 2005 ERS Summer Interns
Front row *(left to right)*: Chatavie Newton, Gaurav Ghosh, Helen Waquiu
Middle row *(left to right)*: Erdal Kara, Elizabeth Ashley, Alba Marie Baez, Jin Zhang, Cristian Lopez, Cheng Zhao, Kara Lynch
Back row *(left to right)*: Nicholas Bradley, Madison Brown, Jason Moore, Mikael Pyrtel, Chao Lin, James Whitaker

Each summer, hundreds of college and graduate students from all over the country descend upon Washington, DC, to observe policymaking from the vantage point of an internship. The benefits to the interns are clear: access to the government's inner workings and key players and opportunities to contribute to the formation, analysis, and operation of policy. But their employers also benefit. For a research agency like ERS, summer internships help sow seeds for the future: by exposing students to the interesting problems and potential contributions of agricultural economics, ERS—and the discipline as a whole—might reap sizable returns in the longer term.

In 2005, ERS summer interns worked on a variety of projects, from assessing the production impacts of direct government payments to farmers, to compiling a global demographics database for use in modeling global food demand, to researching and developing methods to better disseminate ERS research products. Kara Lynch, a graduate student in agricultural economics at Texas A&M University, analyzed ACNielsen Homescan food purchase data. She and ERS economist Ephraim Leibtag investigated the relationship between household income and where households purchase food (grocery stores, supercenters, etc.). In addition to her analytical skills, Kara brought to the project her experience as a Homescan panelist. "As both a Homescan participant and a Homescan data user, I was in the unique position of seeing the survey process from both the data collection and end user viewpoints. As a researcher, this experience helps me appreciate the value of survey design and the nuances of data analysis," says Kara.

ERS interns represent different walks of life, as befits the agency's participation in programs designed to attract academically qualified minority students, including Hispanic Association of Colleges and Universities Internship Program, Washington Internships for Native Students (WINS), and USDA/1890 National Scholars Program. Helen Rain Waiquiu came to ERS through the WINS program. A member of the Sun Clan of the Pueblos of Jemez and Acoma in New Mexico, Helen is studying environmental economics at the University of California at Berkeley. Working with ERS senior economist Elise Golan, Helen contributed to a summary of ERS literature on the economics of food choices, a topic that is of great interest to her. "With the arrival of a fast-food chain to my reservation, I became very interested in weighing the economic costs and benefits of having such a restaurant in our community, given the nationwide epidemic of obesity and related conditions. My experience at ERS not only will further my academic career, but also will inform and shape my community development efforts," says Helen.

Recruitment for 2006 summer interns starts in March with an announcement on the ERS website (www.ers.usda.gov/abouters/employment/).